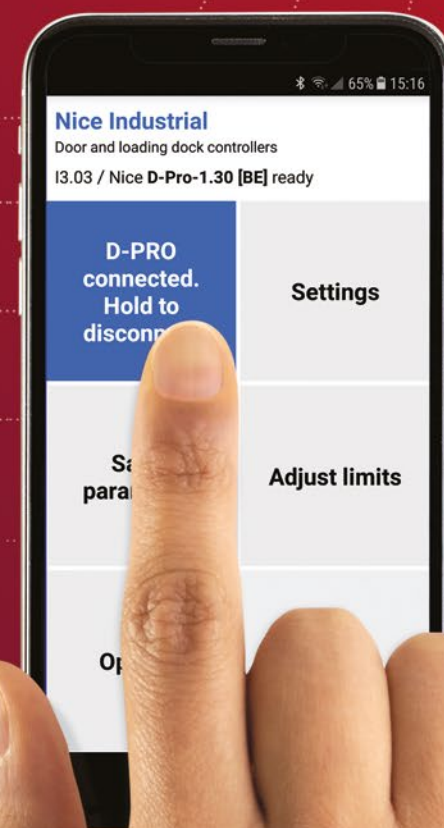


Catalogue 2021

Nice

# Industrial Door.

Automation and management systems  
for industrial doors catalogue.









# Nice opens up your business

Powerful and safe automation systems,  
easy to install and program.







# The strength of the Nice solutions

Reliable and versatile control units  
for industrial and commercial doors.  
Numerous functions at your fingertips.



## D-Pro Action

Extreme ease  
of installation and use.

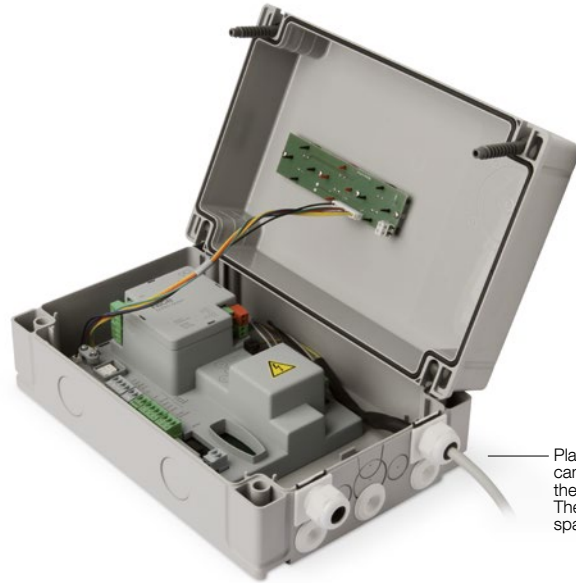


## D-Pro Automatic

The most advanced  
and versatile on the market.

# D-Pro Action

Easy to program and to use



Plastic box, more practical, can be opened on either the right or left side. The ideal solution in confined spaces.



Practical door operation with Up - Stop - Down buttons on the box cover

Long-lasting and very resistant in wet and dusty environments

## Control units for motors with mechanical limit stop or electronic limit switch, both automatic and deadman operation.

Suitable for all types of motor, single phase without integrated inverter and three-phase, with 2.2 kW maximum power.

### Easy programming and 2 LEDs for diagnostics.

**High performance**, with possibility of adding a dedicated module for optional potential free outputs. Compatible with all types of sensitive edges, including wireless.

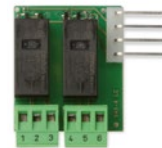
**User-friendly**: thanks to the O-View programmer with multifunction display for connection through the IBT4N interface (both optional).

**Safe**: protected by a plastic shell, to avoid any risk of electrical shock.

**Radio receiver**: dedicated slot to connect a Nice OXI plug-in receiver.

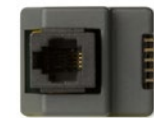
**Smart**, the maintenance service warning can be programmed according to the number of manoeuvres required.

## ACCESSORIES FOR D-PRO ACTION CONTROL UNITS



### NDA040

For optional potential free outputs.



### IBT4N

Interface module for O-View programmer connection.



### OVIEW

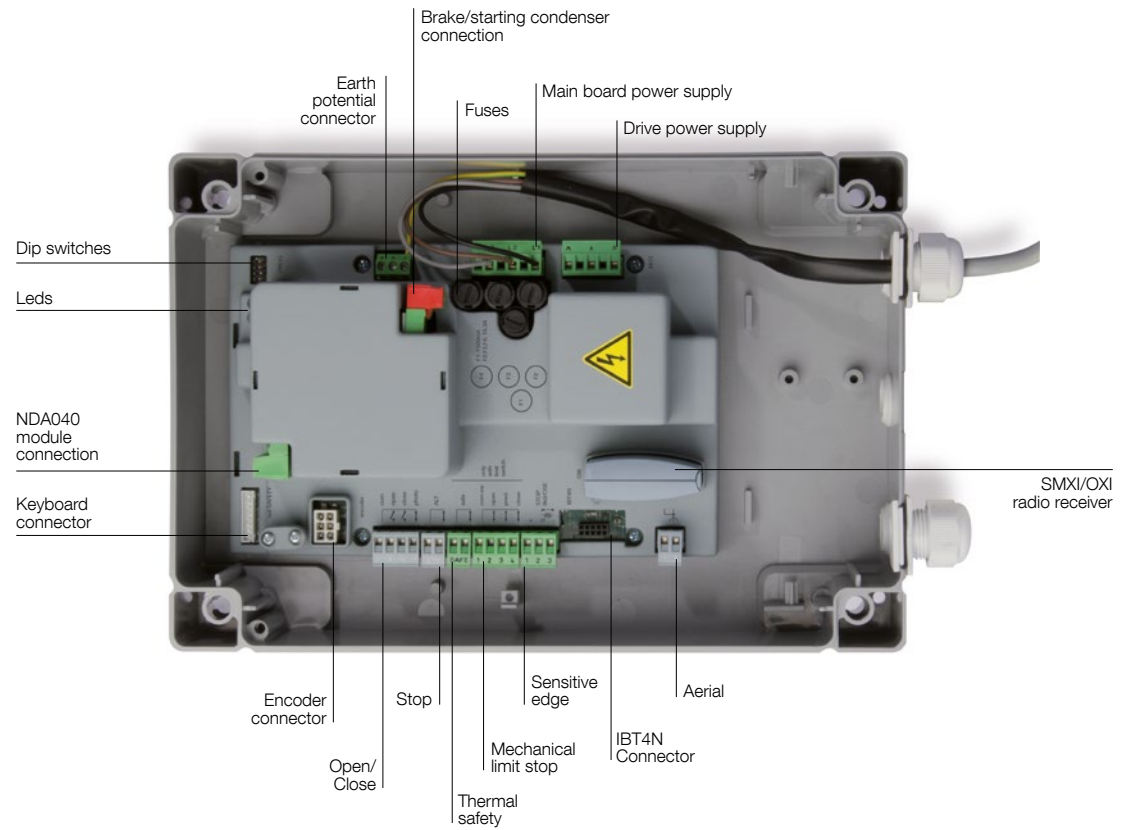
Control unit programming and monitoring device.



### IT4WIFI

Smart Wi-Fi interface to control via smartphone Nice automations compatible with the BusT4 (Opera) protocol.





### D-PRO ACTION CONTROL UNITS

| Code            | Description   | Pcs./Pack |
|-----------------|---|-----------|
| <b>NDCC2000</b> | Control unit for one motor, 400 Vac three-phase, 2.2 Kw                                     | 1         |
| <b>NDCC2100</b> | Control unit for one motor, 400 Vac three-phase with integrated brake rectifier, 2.2 kw     | 1         |
| <b>NDCC2200</b> | Control unit for one motor, 230 Vac single-phase, with integrated condenser control, 2.2 kw | 1         |

### ADDITIONAL MODULES

| Code           | Description  | Pcs./Pack |
|----------------|--|-----------|
| <b>NDA040</b>  | Additional module providing the control unit with two potential free programmable outputs                    | 1         |
| <b>IBT4N</b>   | Additional interface enabling the control unit to communicate with O-View through the nice BusT4 technology  | 1         |
| <b>OVIEW</b>   | Unit for control, programming and diagnostics of the control unit  | 1         |
| <b>IT4WIFI</b> | Smart Wi-Fi interface to control via smartphone Nice automations compatible with the BusT4 (Opera) protocol. | 1         |

### TECHNICAL SPECIFICATIONS

| Code                        | NDCC2000/NDCC2100/NDCC2400   | NDCC2200/ NDCC2500 |
|-----------------------------|--|--------------------|
| Power supply (Vac 50/60 Hz) | 400  | 230                |
| Max motor power (kW)        | 2.2  |                    |
| Power in standby (W)        | < 5  |                    |
| Pre limit input             | programmable   |                    |
| External inputs             | Up, Down and Photo (programmable)  |                    |
| Stop input                  | For sensitive edges of a normally closed and normally open type, opticals, 8.2 K $\Omega$ resistive and 8.2 K $\Omega$ pneumatic |                    |
| Extra output                | 2 free programmable and potential free contacts (by means of NDA040 module)  |                    |
| Services Output             | 24 Vdc max 0.1 A   |                    |
| Operating temperature (°C)  | -20 ÷ +50  |                    |
| Protection class (IP)       | 55   |                    |
| Dimensions (mm)             | 210x125x310 h  |                    |
| Weight (kg)                 | 2.5  |                    |

# D-Pro Automatic

The most advanced and versatile



Plastic box, more practical, can be opened on either the right or left side. The ideal solution in confined spaces.

**Control units for motors with mechanical limit stop or electronic limit switch, both automatic and deadman operation. In compliance with all European norms and certified by TÜV NORD CERT GmbH.**

Suitable for almost all industrial motors on the market, single phase with or without integrated inverter and three-phase, with 5.5 kW maximum power.

**Easy programming and immediate diagnostics** thanks to the 4-digit display integrated in the cover.

**High performance**, with possibility of adding dedicated modules for additional functions such as traffic lights and loop detectors and to connect external transmitters. Compatible with all types of sensitive edges, including wireless.

**The ideal solution for interlocking doors:** thanks to the dedicated function, the control unit can be used to operate a number of doors in succession, to restrict or control entry to and from areas that need to be secured against two or more doors being open simultaneously.

**Safe:** protected by a plastic shell, to avoid any risk of electrical shock.

**Radio receiver:** dedicated slot to connect a Nice OXI plug-in receiver.

**Smart,** the maintenance service warning can be programmed according to the number of manoeuvres required.

**Customizable:** further button configurations are available on request, such as emergency stop switch.

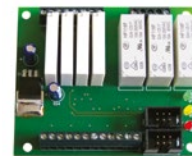
**The TÜV NORD CERT GmbH certification and compliance with EN 12453:2014 mean safety in all situations.**

Easy programming, immediate reading of system status and diagnostics by means of the large 4-digit display integrated in the cover



Practical door operation with Up - Stop - Down buttons on the box cover

## ADDITIONAL MODULES FOR D-PRO AUTOMATIC CONTROL UNITS



**NDA030**  
For a two-way traffic light and extra programmable inputs/outputs.



**NDA070**  
For vehicle detection by induction coils.



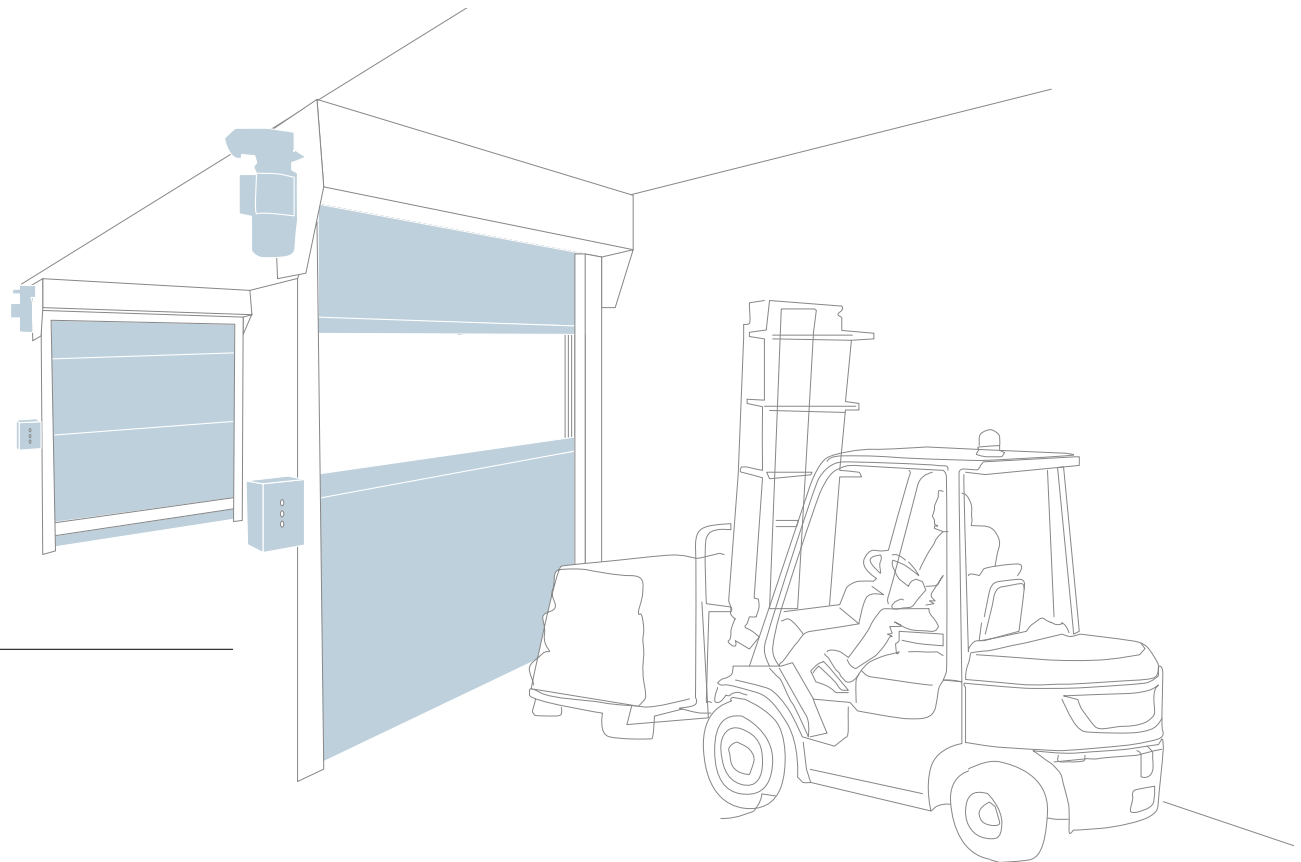
**NDA004**  
Programming and installation module.





## App Nice Industrial

For control unit programming by android smartphone or tablet through Bluetooth connection.



### THE ADVANTAGES OF THE NICE AUTOMATION SYSTEM

The integrated interlocking function allows two or more doors to be operated in succession: the ideal solution for cold storage facilities

### D-PRO AUTOMATIC CONTROL UNITS

| Code            | Description  | Pcs./Pack |
|-----------------|--|-----------|
| <b>NDCC1003</b> | Control unit for one motor, 400 Vac, three-phase, 5,5 kW             | 1         |
| <b>NDCC1000</b> | Control unit for one motor, 400 Vac, three-phase, 2.2 Kw             | 1         |
| <b>NDCC1100</b> | Control unit for one motor, 230 Vac with integrated inverter, 2.2 Kw | 1         |
| <b>NDCC1200</b> | Control unit for one motor, 230 Vac single-phase, 2.2 kW             | 1         |

### ADDITIONAL MODULES

| Code          | Description  | Pcs./Pack |
|---------------|--|-----------|
| <b>NDA030</b> | Additional I/O expander for D-Pro Automatic control unit with two-way traffic lights function, six more general purpose inputs and four potential free outputs | 1         |
| <b>NDA070</b> | Additional 1 or 2 channels module for induction coils connection (12-24 Vdc) with numerous programmable functions  | 1         |

### TECHNICAL SPECIFICATIONS

| Code                        | <b>NDCC1003</b>  | <b>NDCC1000</b> | <b>NDCC1100/NDCC1200</b> |
|-----------------------------|--|-----------------|--------------------------|
| Power supply (Vac 50/60 Hz) | 400  | 400             | 230                      |
| Max motor power (kw)        | 5.5  | 2.2             |                          |
| Power in standby (W)        | < 4  |                 |                          |
| Pre limit input             | programmable   |                 |                          |
| External inputs             | Up, Down, Stop, Step-by-step, all programmable   |                 |                          |
| Outputs                     | 3 free programmable outputs  |                 |                          |
| Stop input                  | For sensitive edges of a normally closed and normally open type, opticals, 8.2 KΩ resistive and 8.2 KΩ pneumatic |                 |                          |
| Services Output             | 24 Vdc 600 mA  |                 |                          |
| Operating temperature (°C)  | -20 ÷ +50  |                 |                          |
| Protection class (IP)       | 55   |                 |                          |
| Dimensions (mm)             | 210x125x310 h  |                 |                          |
| Weight (kg)                 | 3.5  |                 |                          |

# Additional tools for more functions



NICE INSTALLATION AT VEOLIA CAMPUS ENVIRONMENT CENTRE EST, FRANCE

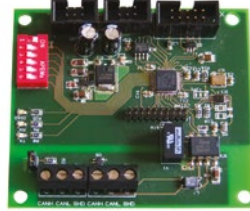


# D-Pro Monitoring and interface modules

For industrial doors control and management



**NDA004**  
Programming  
and installation module.



**NDA006**  
Communication module.



**NDA008**  
Repeater module  
with integrated router.

**Modules for the continuous remote monitoring, control and management of industrial doors, including via internet, simply and quickly.**

## Nice Industrial Configuration Tools

Innovative system to simplify installation, control and monitoring of industrial automation systems. Configuration software tools and the App for the D-Pro Automatic control unit for the **complete management of complex industrial doors systems by PC, smartphone or tablet.**

## By adding the NDA006 communication module

to each D-Pro Automatic control unit, all the working parameters of the system can be transferred and reported to a NDA008 central control unit using a two-wires CAN field bus. The interface allows connection to PCs or servers via intranet or internet connection and also access to D-Pro Automatic parameters, including remotely, to modify them or read the error code history and life cycle.

## The ideal solution for large installations, such as logistic centres.

The NDA008 module with integrated router, LAN and USB connections, allows you to access the system remotely, checking it in real time thanks to the possibility of connecting a web cam. Via the management software, the information is accessible directly from a PC connected to an external server.

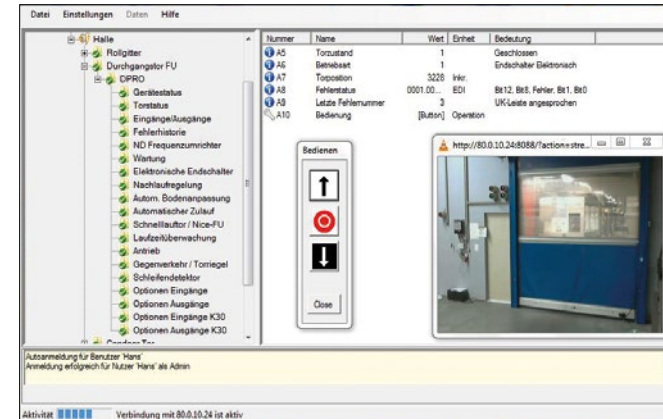
## Better customer support, thanks to more information available.

Collected data may be stored in a central SQL database for further analysis and reporting and can be used for maintenance planning.

## Firmware upgrade and bluetooth connection

The NDA004 module for bluetooth connection between D-Pro Automatic and portable devices, smartphones or tablets. The module can be used to program the limit positions and store the D-Pro Automatic control unit parameters by means of the new application. The NDA004 allows easy upgrade of the firmware version and transfer of the stored settings from one D-Pro Automatic to another, for quick programming of a group of control units.

## NICE INDUSTRIAL CONFIGURATION TOOL



Software for system configuration by PC.



## App Nice Industrial

For control unit programming by android smartphone or tablet through Bluetooth connection.



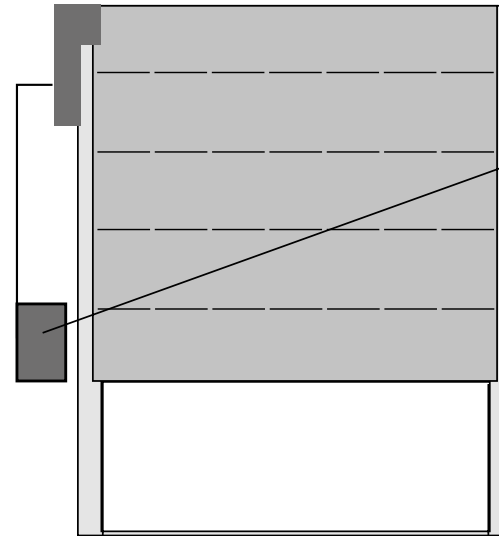
| Codice        | Descrizione  | PZ./CONF. |
|---------------|--|-----------|
| <b>NDA004</b> | Additional module for programming the control unit with the app Nice Industrial through the Bluetooth connection and for quick firmware upgrades or parameters storage   | 1         |
| <b>NDA006</b> | Additional module for Internet and Intranet communication between D-Pro Automatic control units. To be used in combination with the repeater module NDA008 in order to create a network of remotely controllable ports | 1         |
| <b>NDA008</b> | Repeater module with graphic display, in plastic box, to control up to 30 communication modules  | 1         |

# Take advantage of the Nice automation system

## More services at your fingertips

The solution for the control of industrial doors, always at your fingertips.

D-PRO AUTOMATIC CONTROL UNIT



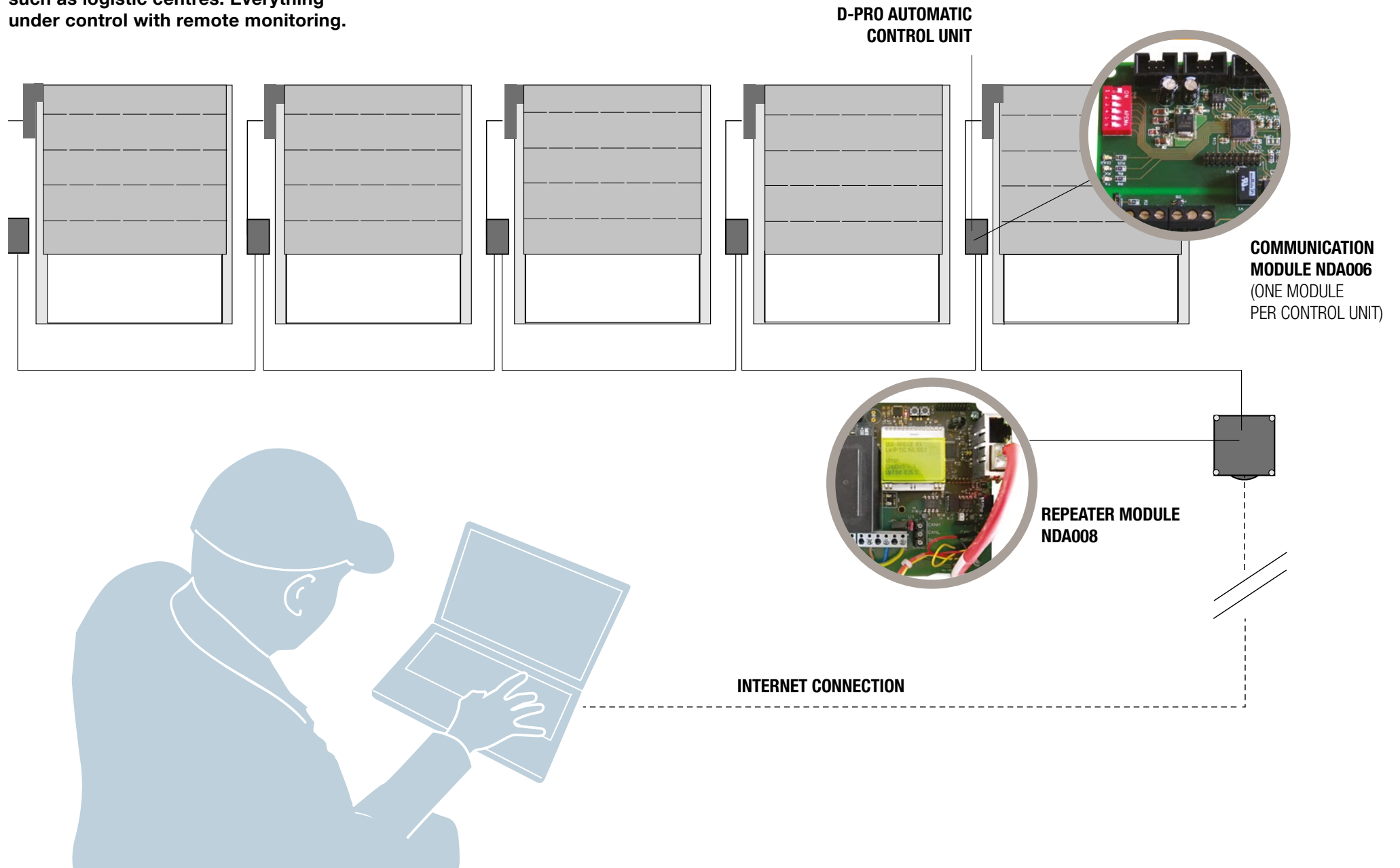
NDA004 MODULE



BLUETOOTH CONNECTION



The ideal solution for large installations, such as logistic centres. Everything under control with remote monitoring.



# Nice, made-to-measure solutions

Versatile automation systems,  
easy to install and program.





# Take advantage of the Nice gearmotors for industrial automation

- Cutting-edge gearmotors with advanced technology
- Gearmotors for more reliable long-lasting operation
- High quality of detail
- Convenient and practical solutions
- Meets safety requirements

- Performance characteristics compliant with european directives and leading internationally recognized standards, including:
  - Directive 2004/108/EC: Electromagnetic Compatibility
  - Directive 2006/42/EC: Machinery Directive
  - EN 60335-1:2013, EN60335-2-103:2016-05 Safety of electrical products
  - TÜV NORD CERT GmbH



**SW/SD**

For sectional doors



**RDF**

For rolling shutters



**HDFN/HDFNI**

For high speed doors





# SW/SD

For sectional doors



SERIES SWN



SERIES SD

**Electromechanical gearmotor for sectional doors.**  
**Versions for 230 VAC single-phase and 230/400 VAC three-phase, with new mechanical limit stops or electronic limit switches.**

**Simple installation:**  
 The gearmotor is installed directly on the shaft of the sectional door. Connection cables equipped with connectors simplify electrical installation.

**Sturdy**  
 Gearmotor with bronze gears and permanent lubrication.

**Practical**  
 Release available in 3 versions:

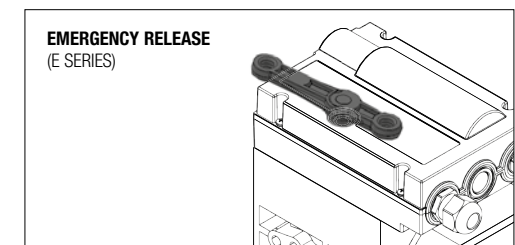
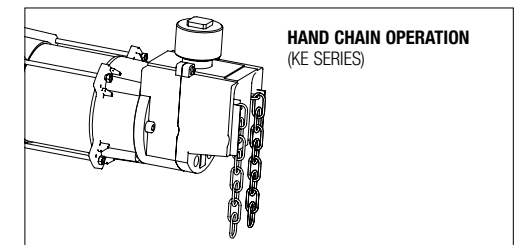
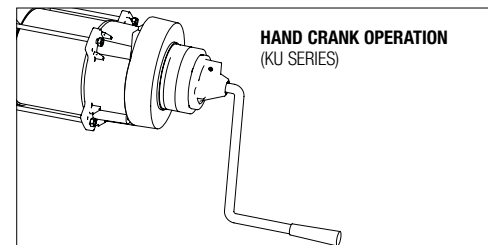
- cable release;
- crank emergency;
- chain-operated emergency, the ideal solution for every type of application.

**Compact and efficient:**  
 torque up to 140 Nm, speed up to 24 rpm.

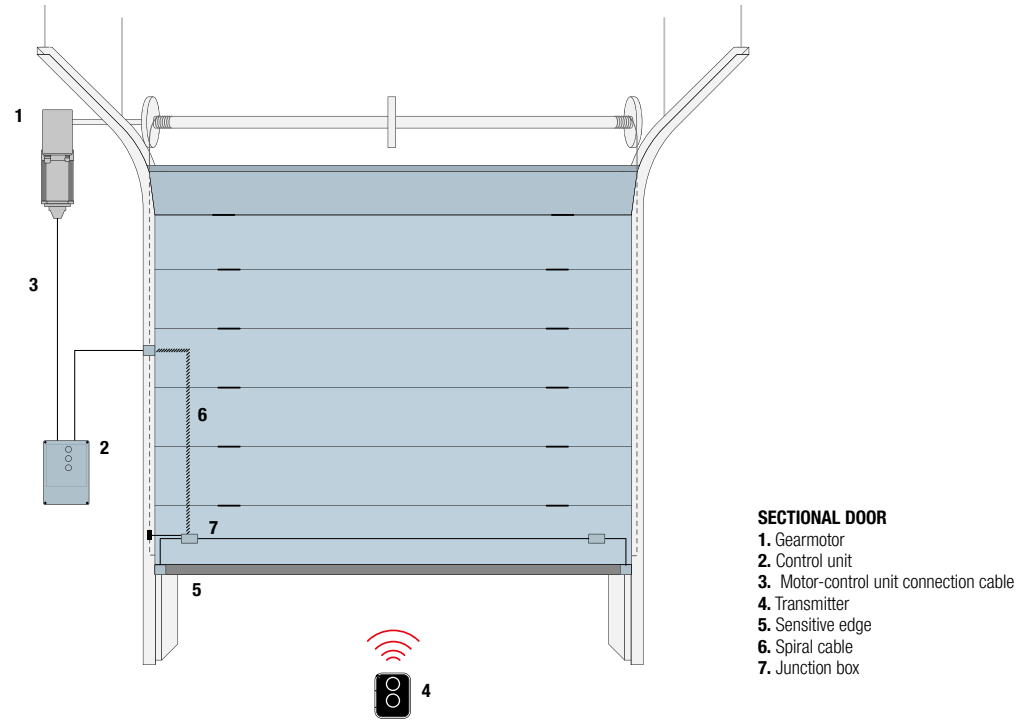
**Safety:**  
 gearmotors compliant with the most recent European standards and directives in terms of safety and technology.

**Total Speed Control via Inverter:**  
 All three phase sectional gearmotors are compatible with 230V single phase inverter. Acceleration and deceleration phases can be controlled. Besides door opening and closing speed can be regulated. Nice inverter is easy to install thanks to plug&play connectors to connect it to the control unit.

## EMERGENCY OPERATIONS



**INSTALLATION DIAGRAM**



**SECTIONAL DOOR**

- 1. Gearmotor
- 2. Control unit
- 3. Motor-control unit connection cable
- 4. Transmitter
- 5. Sensitive edge
- 6. Spiral cable
- 7. Junction box

**TECHNICAL SPECIFICATIONS**

| Type                                     | SWN-70-20  | SWT-70-20** | SD-70-20 | SD-80-30    | SD-100-24** | SD-120-20 | SD-140-20** |
|--|--|-------------|----------|-------------|-------------|-----------|-------------|
| Hollow shaft Ø (mm)                      | 25.4   |             |          | 25.4/31.75  |             |           |             |
| Max. Torque (Nm)                         | 70   |             |          | 80          | 100         | 120       | 140         |
| Rated torque (Nm)                        | 60   |             |          | 80          |             | 100       | 120         |
| Static safety torque (Nm)                | 450  |             |          | 600         |             |           |             |
| Weight lifted* (kg)                      | 300  |             |          | 550         |             |           |             |
| Output speed (rpm)                       | 20   |             |          | 30          | 24          | 20        |             |
| Motor Power (kW)                         | 0.37   |             |          | 0.55        | 0.37        |           | 0.55        |
| Limit switch                             | 15   |             |          | 40          | 15          |           | 15/40       |
| Working voltage (V)                      | 1~230  |             |          | 3~230/3~400 |             |           |             |
| Working frequency (Hz)                   | 50   |             |          | 50          |             |           |             |
| Rated current (A)                        | 2.3  | 2.8         | 1.5      | 1.5         | 1.9         | 1.5       | 1.8         |
| Cycles/hour                              | 5  |             | 6        | 6           | 7           | 5         | 6           |
| Connection cable (n° x mm <sup>2</sup> ) | 4x1.5mm <sup>2</sup> - 6x0.75mm <sup>2</sup> - 2x0.75mm <sup>2</sup> |             |          |             |             |           |             |
| Operating temperature (°C)               | -5 ÷ +40   |             |          |             |             |           |             |
| Noise dB(A)                              | <70  |             |          |             |             |           |             |
| Protection rating (IP)                   | 54   |             |          |             |             |           |             |
| Weight (kg)                              | 13.2   | 11.5        | 11.1     | 12          | 11.1        | 11        | 12          |



\*For balanced door with 1-4 compensation springs with 160mm rope drum, observe the permitted cables forces and the general rules of safety.

\*\* TÜV tested



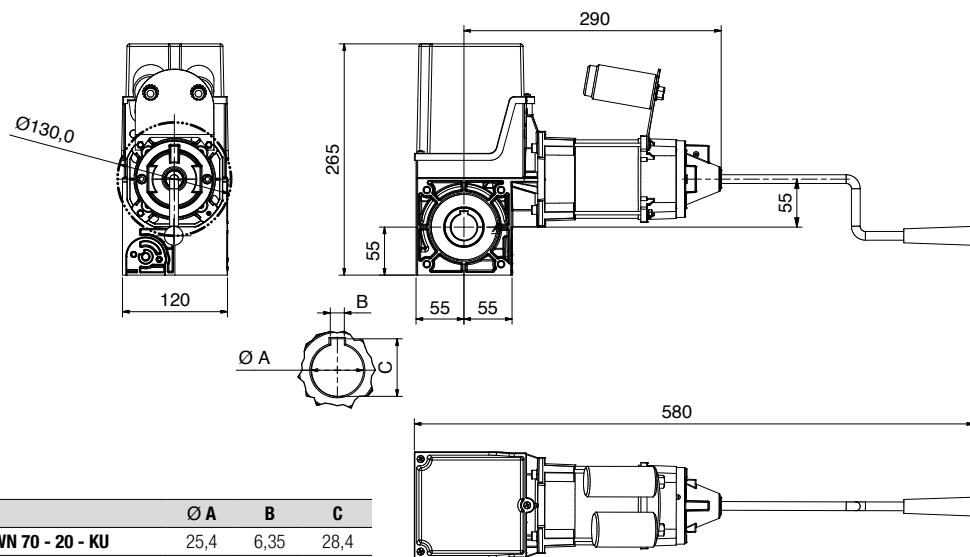
# How to choose the ideal motor for sectional doors

## SW/SD industrial drives

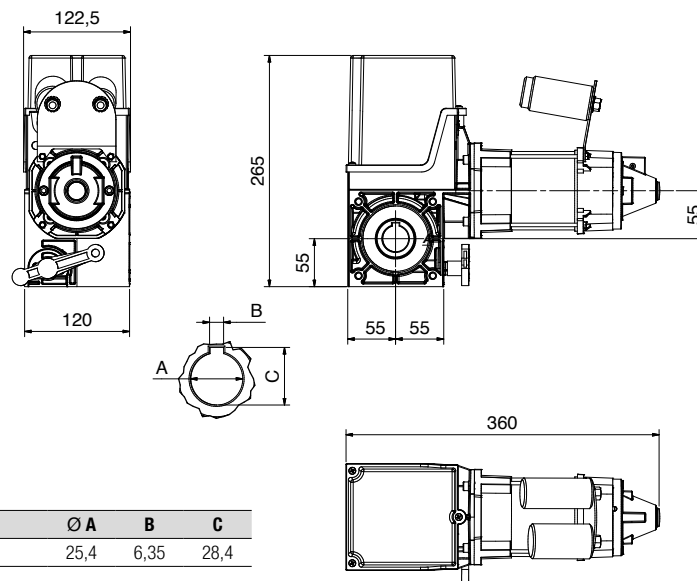
|                            |                           |                             |                                |                           | Suitable Cable    |                    |                  | Suitable Control unit   |                 |          |          |
|----------------------------|---------------------------|-----------------------------|--------------------------------|---------------------------|-------------------|--------------------|------------------|---|-----------------|----------|----------|
|                            |                           |                             |                                |                           | Code              |                    |                  | Code  |                 |          |          |
|                            |                           |                             |                                |                           |                   |                    |                  |   |                 |          |          |
|                            |                           |                             |                                |                           | 5 m cable         | 7 m cable          | 11 m cable       | D-Pro Action  | D-Pro Automatic |          |          |
| Sectional drives           | Power supply              | Limit switch type           | Description                    | Hand crank (KU)           | Hand chain (KE)   | Manual release (E) |                  |   |                 |          |          |
|                            | 3 x 400 Vac               | Encoder - 15 turns          | Type - Nm - Rpm - Hollow shaft | Trade Code                | Trade code        | Trade code         | CA0174A00        | CA0175A00   | CA0176A00       | NDCC2000 | NDCC1000 |
|                            |                           |                             | SD 70 Nm 24 rpm Ø 25.4 mm      | SD 70.24 EL15 KU          | SD 70.20 EL15 KE  | SD 70.20 EL15 E    |                  |   |                 |          |          |
|                            |                           |                             | SD 100 Nm 24 rpm Ø 25.4 mm     | SD 100.24 EL15 KU         | SD 100.24 EL15 KE | SD 100.24 EL15 E   |                  |   |                 |          |          |
|                            |                           |                             | SD 120 Nm 20 rpm Ø 25.4 mm     | SD 120.20 EL15 KU         | SD 120.20 EL15 KE | SD 120.20 EL15 E   |                  |   |                 |          |          |
|                            |                           |                             | SD 140 Nm 20 rpm Ø 25.4 mm     | SD 140.20 EL15 KU         | SD 140.20 EL15 KE | SD 140.20 EL15 E   |                  |   |                 |          |          |
|                            |                           | SD 140 Nm 20 rpm Ø 31.75 mm | SD 140.20 EL15 KU              | SD 140.20 EL15 KE         | SD 140.20 EL15 E  |                    |                  |   |                 |          |          |
|                            |                           | Encoder - 40 turns          | SD 80 Nm 30 rpm Ø25.4 mm       | SD 80.30 EL40 KU          | SD 80.30 EL40 KE  | SD 80.30 EL40 E    |                  |   |                 |          |          |
|                            |                           |                             | SD 140 Nm 20 rpm Ø25.4 mm      | SD 140.20 EL40 KU         | SD 140.20 EL40 KE | SD 140.20 EL40 E   |                  |   |                 |          |          |
|                            |                           |                             | Mechanical - 15 turns          | SD 70 Nm 20 rpm Ø25.4 mm  | SD 70.20 ME15 KU  | SD 70.20 ME15 KE   | SD 70.20 ME15 E  |   |                 |          |          |
|                            |                           |                             |                                | SD 100 Nm 24 rpm Ø25.4 mm | SD 100.24 ME15 KU | SD 100.24 ME15 KE  | SD 100.24 ME15 E |   |                 |          |          |
|                            | SD 120 Nm 20 rpm Ø25.4 mm |                             |                                | SD 120.20 ME15 KU         | SD 120.20 ME15 KE | SD 120.20 ME15 E   |                  |   |                 |          |          |
| SD 140 Nm 20 rpm Ø25.4 mm  | SD 140.20 ME15 KU         | SD 140.20 ME15 KE           |                                | SD 140.20 ME15 E          |                   |                    |                  |   |                 |          |          |
| SD 140 Nm 20 rpm Ø31.75 mm | SD 140.20 ME15 KU         | SD 140.20 ME15 KE           |                                | SD 140.20 ME15 E          |                   |                    |                  |   |                 |          |          |
| 1 x 230 Vac                | Encoder - 15 turns        | SWT 70 Nm 20 rpm Ø25.4 mm   | SWT 70.20 EL15 KU              | SWT 70.20 EL15 KE         | SWT 70.20 EL15 E  | CA0174A00          | CA0175A00        | CA0176A00   | NDCC2200        | NDCC1200 |          |
|                            |                           | SWN 70 Nm 20 rpm Ø25.4 mm   | SWN 70.20 EL15 KU              | SWN 70.20 EL15 KE         | -                 | CA0174A00          | CA0175A00        | CA0176A00   |                 |          |          |
|                            | Mechanical - 15 turns     | SWT 70 Nm 20 rpm Ø25.4 mm   | SWT 70.20 ME15 KU              | SWT 70.20 ME15 KE         | SWT 70.20 ME15 E  | CA0157A00          | CA0158A00        | CA0159A00   |                 |          |          |
|                            |                           | SWN 70 Nm 20 rpm Ø25.4 mm   | SWN 70.20 ME15 KU              | SWN 70.20 ME15 KE         | -                 | CA0174B00          | CA0175B00        | CA0176B00   |                 |          |          |

MODEL:

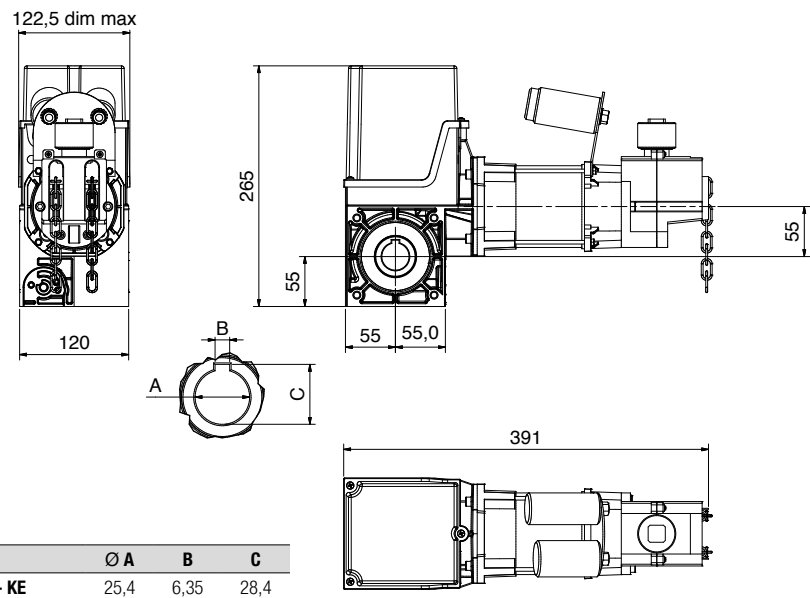
SWN 70 - 20 - KU



SWN 70 - 20 - E

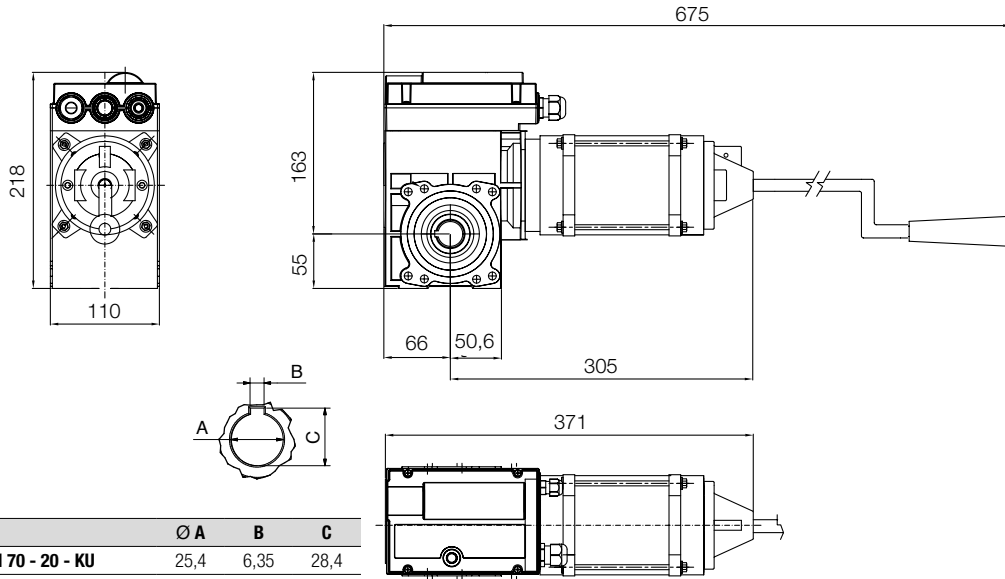


SWN 70-20 KE

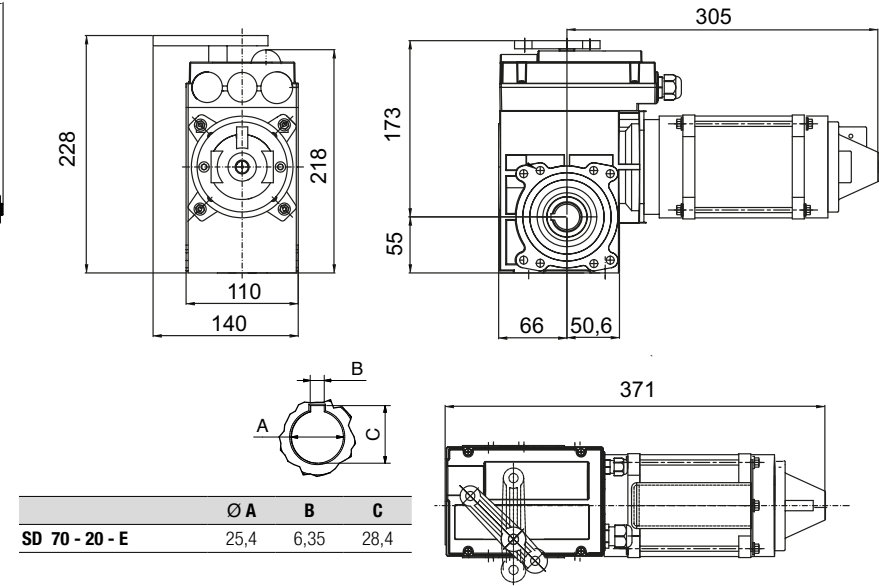


MODEL:

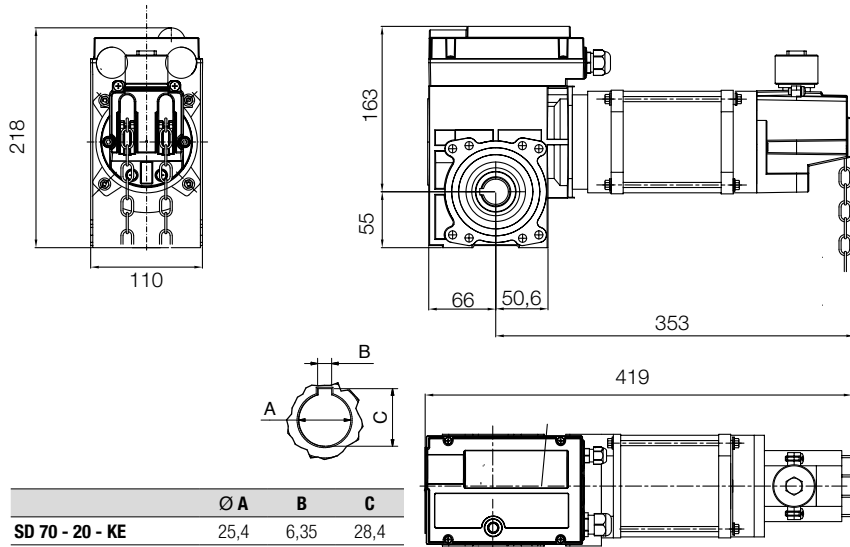
SD 70-20 KU



SD 70-20 E



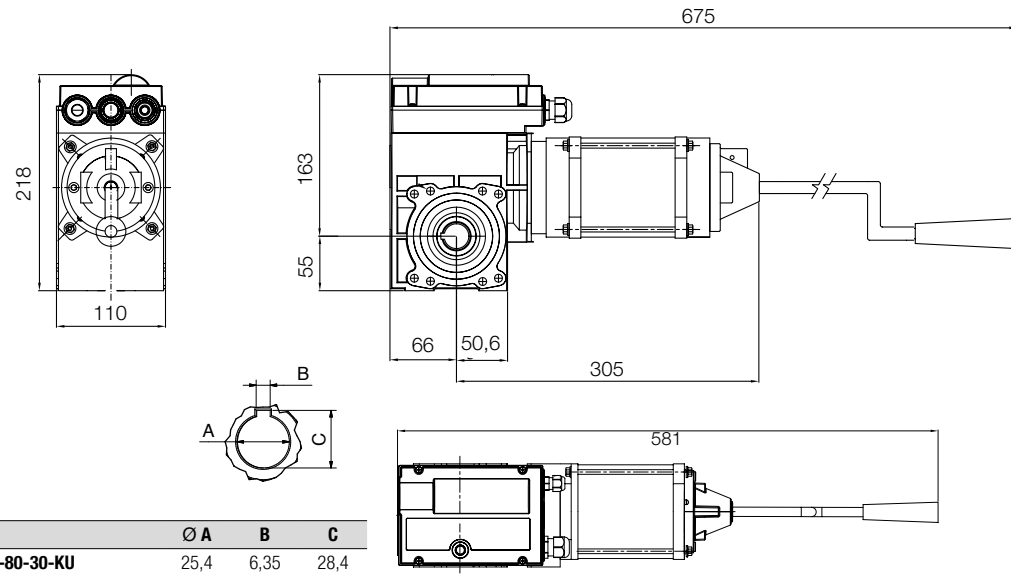
SD 70 - 20 - KE



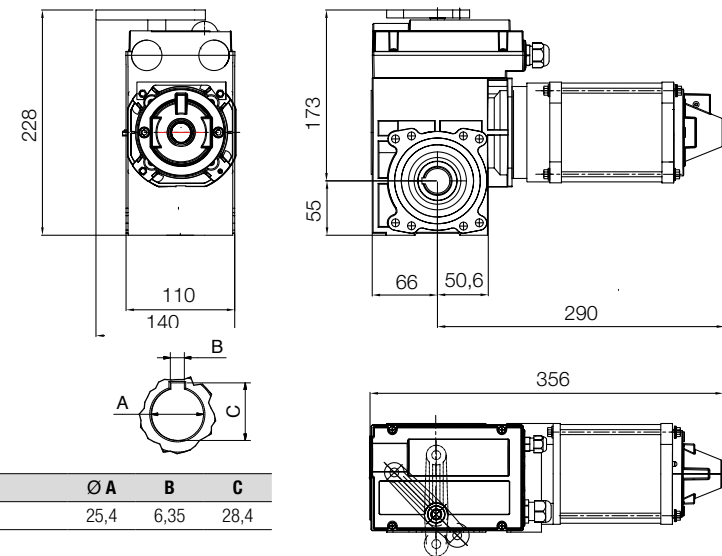


**MODEL:**

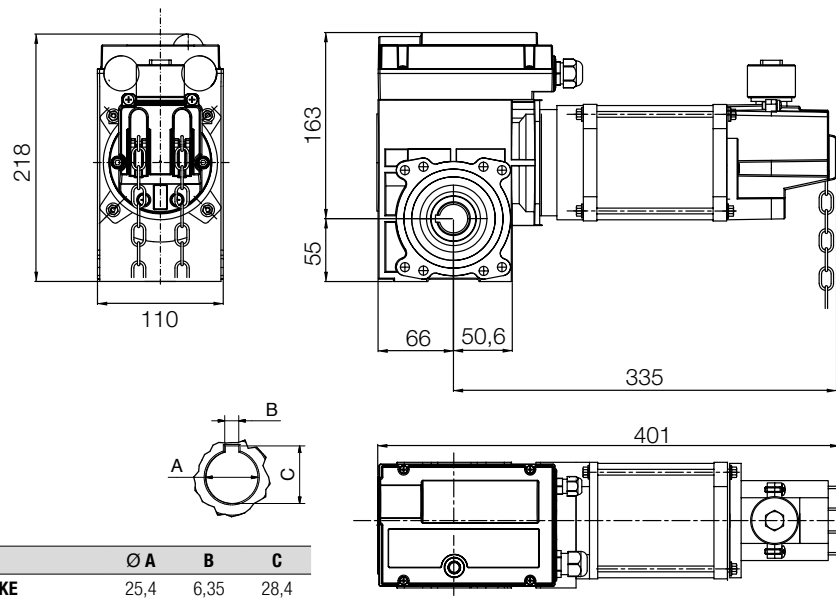
**SD-80-30-KU**



**SD-80-30-E**

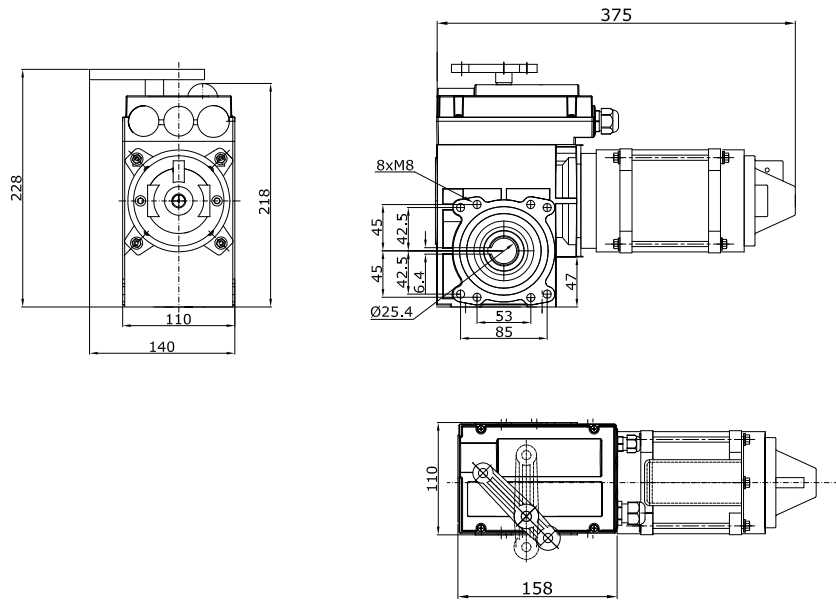


**SD-80-30-KE**

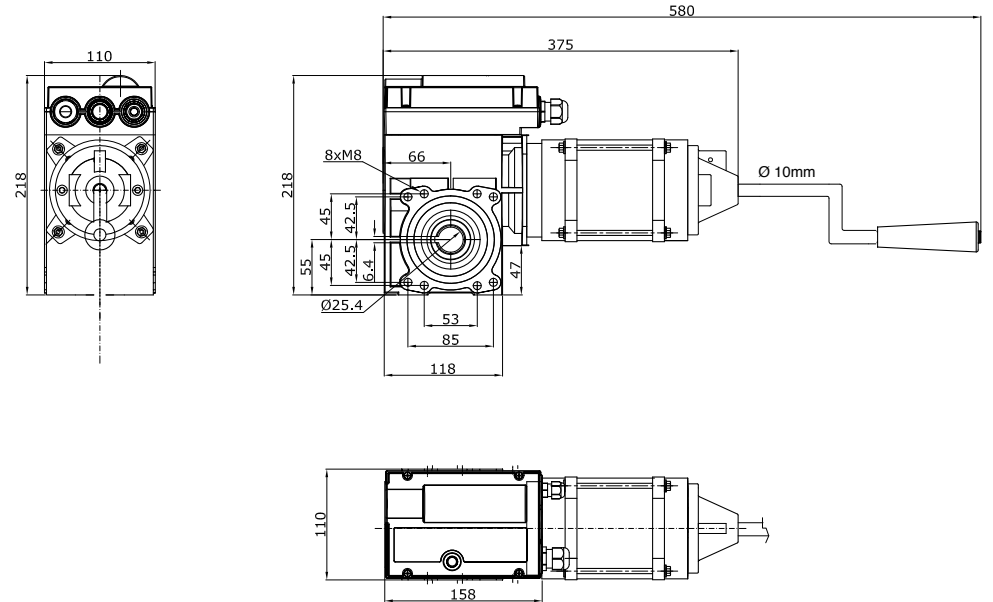


**MODEL:**

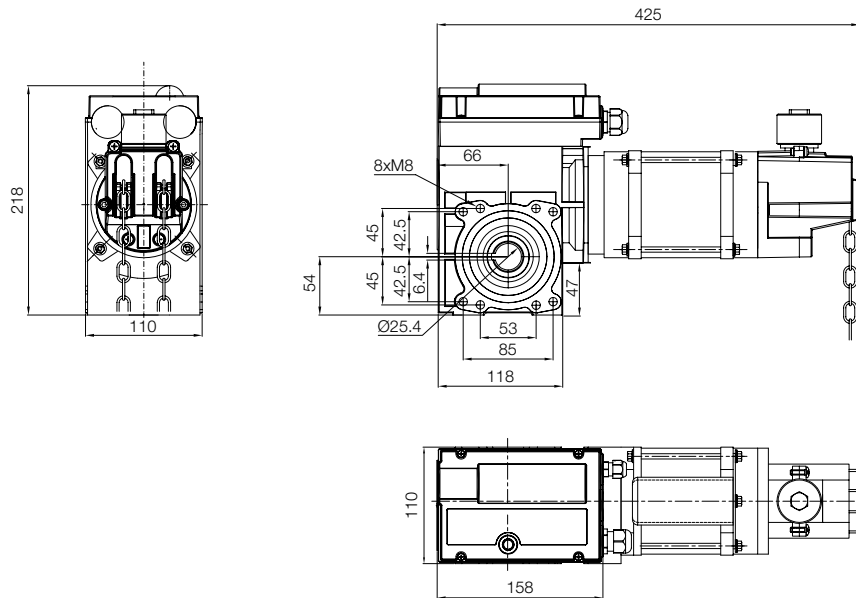
**SD-100-24-E, SD-120-20-E, SD-140-20-E**



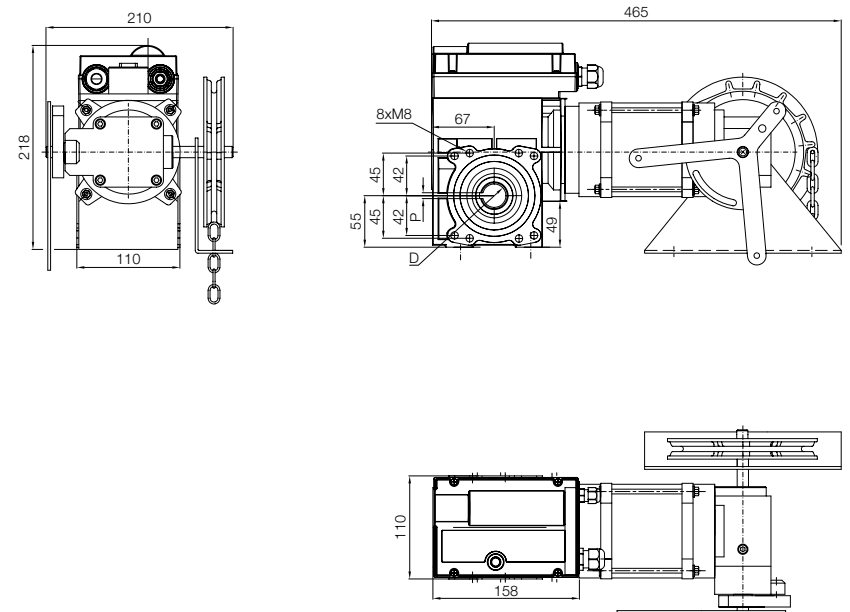
**SD-100-24-KU, SD-120-20-KU, SD-140-20-KU**



**SD-100-24-KE, SD-120-20-KE, SD-140-20-KE**



**SD-100-24-KE2, SD-120-20-KE2, SD-140-20-KE2**





54

56

58

60



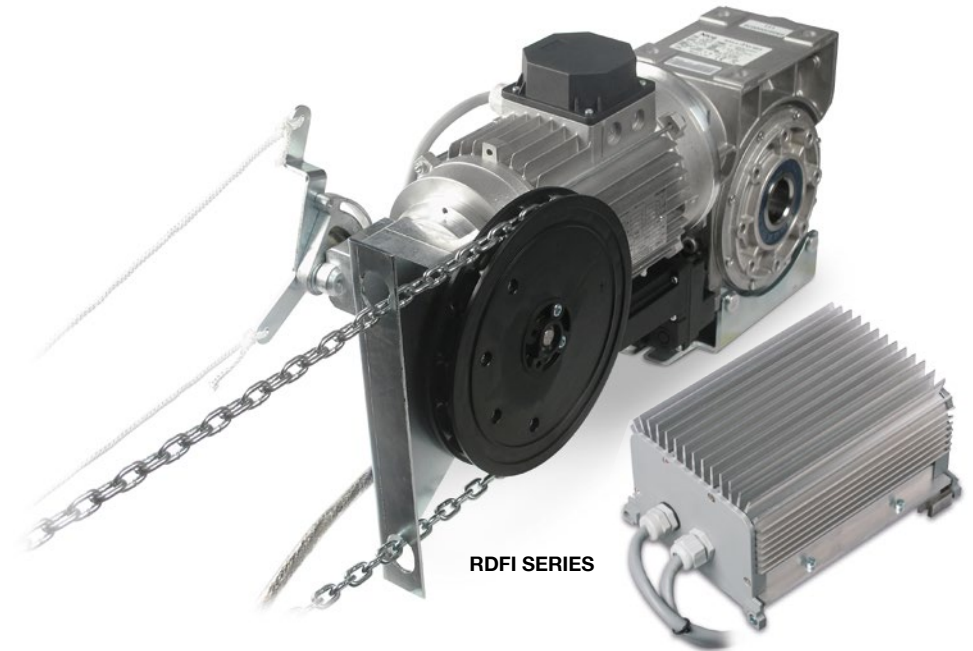


# RDF / RDFI

For rolling shutters



RDF SERIES



RDFI SERIES

**Electromechanical gearmotor for rolling shutters with integrated brake and mechanical limit stops or electronic limit switches, chain-operated emergency (KE series) or crank emergency (KU series) with integrated anti-fallback device.**

**Simple installation:**

the gearmotor is installed directly on the shaft of the rolling door (Ø 30 mm, Ø 40 mm, Ø 55 mm). Connection cables equipped with connectors simplify electrical installation.

**Compact and efficient:**

torque up to 1,400 Nm, speed up to 24 rpm.

**High safety** thanks to the anti-fallback safety system and possibility of connecting safety devices such as optical or resistive sensitive edges (8.2 kΩ). Gearmotors compliant with the most recent European standards and directives in terms of safety and technology.

**Practical**

Release available in 2 versions:

- crank emergency;
- chain-operated emergency, the ideal solution for every type of application.

**More force:**

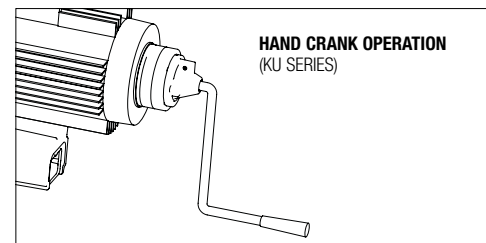
on the RDF series, torque can be increased by means of 1:2 and 1:3 chain reduction kits.

Available on request: special fastening accessories, shafts and discs for welding.

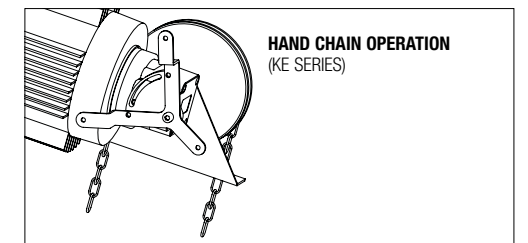
**Total speed control via Inverter:**

All three phase rolling shutter gearmotors are compatible with 230V single phase inverter. Acceleration and deceleration phases can be controlled. Besides door opening and closing speed can be regulated. Nice inverter is easy to install thanks to plug&play connectors to connect it to the control unit.

**EMERGENCY OPERATIONS**

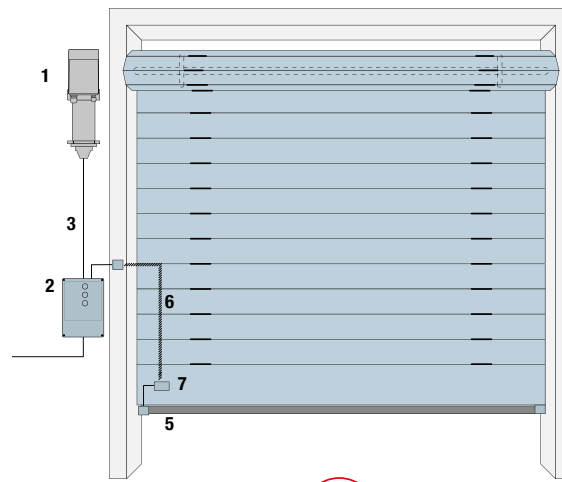
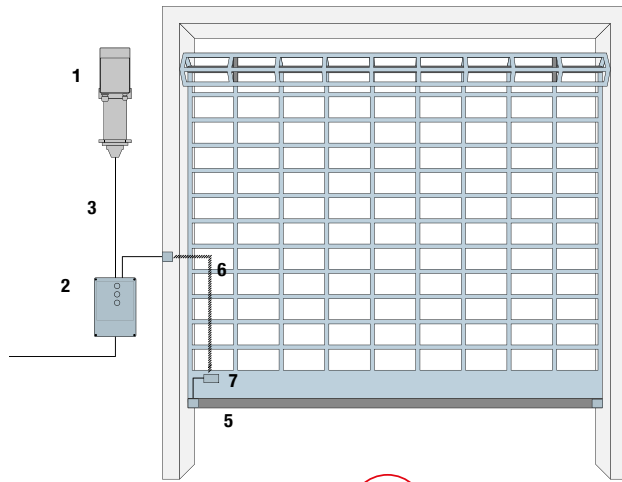


HAND CRANK OPERATION (KU SERIES)

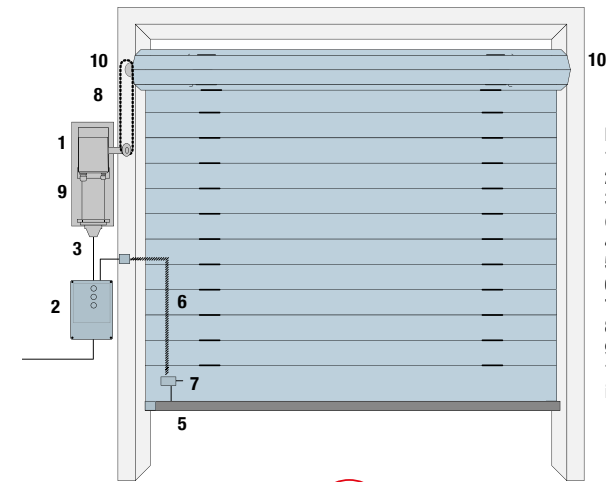


HAND CHAIN OPERATION (KE SERIES)

INSTALLATION DIAGRAM RDF SERIES



INSTALLATION DIAGRAM CHAIN-DRIVEN RDF 24 RPM



ROLLING SHUTTERS

- 1. Gearmotor
- 2. Control unit
- 3. Motor-control unit connection cable
- 4. Transmitter
- 5. Sensitive edge
- 6. Spiral cable
- 7. Junction box
- 8. Chain reduction system
- 9. Foot bracket
- 10. Safety bearing (can be installed on both sides)

Steel pipe EN 10220 (mm)

| RDF series         | 101,6 x 3,6 | 108,0 x 3,6 | 133,0 x 4 | 159,0 x 4,5 | 177,8 x 5 | 193,7 x 5,4 | 219,1 x 5,9 | 244,5 x 6,3 | 273,0 x 6,3 | 298,5 x 7,1 | 323,9 x 7,1 |
|--------------------|-------------|-------------|-----------|-------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>RDF-140-20</b>  | 125         | 122         | 115       | 106         | 99        | 94          | 85          | 77          | 69          | 64          | 59          |
| <b>RDF-220-15</b>  | 208         | 204         | 192       | 177         | 166       | 157         | 142         | 128         | 115         | 106         | 98          |
| <b>RDF-290-15</b>  | 260         | 255         | 240       | 221         | 207       | 197         | 177         | 160         | 144         | 133         | 123         |
| <b>RDF-380-15</b>  | 375         | 368         | 335       | 319         | 299       | 284         | 255         | 231         | 208         | 192         | 177         |
| <b>RDF-450-15</b>  | 416         | 408         | 383       | 354         | 332       | 315         | 284         | 256         | 231         | 213         | 197         |
| <b>RDF-550-12</b>  | 468         | 460         | 431       | 399         | 373       | 355         | 319         | 289         | 260         | 240         | 222         |
| <b>RDF-250-24</b>  | 239         | 237         | 225       | 211         | 201       | 190         | 176         | 160         | 144         | 133         | 123         |
| <b>RDF-350-24</b>  | 335         | 332         | 315       | 296         | 281       | 266         | 247         | 224         | 202         | 186         | 172         |
| <b>RDF-500-24</b>  | 479         | 475         | 451       | 423         | 402       | 381         | 352         | 321         | 289         | 266         | 247         |
| <b>RDF-750-24</b>  | 677         | 664         | 623       | 576         | 539       | 513         | 461         | 417         | 376         | 346         | 321         |
| <b>RDF-950-24</b>  | 885         | 868         | 815       | 753         | 705       | 671         | 603         | 545         | 492         | 453         | 419         |
| <b>RDF-750-9.5</b> | 781         | 715         | 671       | 620         | 581       | 552         | 497         | 449         | 405         | 373         | 345         |
| <b>RDF-1250-24</b> | 1145        | 1124        | 1055      | 975         | 913       | 869         | 781         | 706         | 637         | 586         | 543         |
| <b>RDF-1400-24</b> | 1354        | 1324        | 1247      | 1152        | 1079      | 1026        | 923         | 835         | 753         | 693         | 642         |
| <b>RDF-850-10</b>  | -           | -           | -         | 664         | 622       | 592         | 532         | 481         | 434         | 400         | 370         |
| <b>RDF-1100-10</b> | -           | -           | -         | 842         | 788       | 750         | 675         | 610         | 550         | 506         | 469         |
| <b>RDF-1400-7</b>  | -           | -           | -         | 1063        | 1038      | 987         | 888         | 770         | 724         | 666         | 617         |
| <b>RDFI-250-24</b> | 191         | 189         | 180       | 168         | 160       | 152         | 140         | 128         | 115         | 106         | 98          |
| <b>RDFI-350-24</b> | 268         | 265         | 252       | 236         | 224       | 212         | 197         | 179         | 161         | 148         | 137         |
| <b>RDFI-500-24</b> | 383         | 380         | 360       | 338         | 321       | 304         | 281         | 256         | 231         | 212         | 197         |

The table applies to section bars with a single wall only (thickness 20 mm). The dimensions must be taken into account for winding if section bars with double wall or greater thickness or height are used.

In this case higher torque applies after 1-2 turns. A 20% friction loss is considered for the normal rolling shutters in the table.

It is generally advisable to check the door proportions when there are coverings, section bars with double wall or doors higher than normal, or in the case of particular entry situations that could require other force ratios or cause additional friction losses (e.g. doors that are wider than the height), for example.

## TECHNICAL SPECIFICATIONS RDF SERIES

| Type                                     | RDF-140-20    | RDF-200-15 | RDF-220-15 | RDF-290-15 | RDF-380-15 | RDF-450-15 | RDF-550-12 | RDF-750-9,5 | RDF-850-10 | RDF-1100-10 | RDF-1400-7 |
|--|---------------|------------|------------|------------|------------|------------|------------|-------------|------------|-------------|------------|
| Hollow shaft Ø (mm)                      | 30            |            |            |            | 40         |            |            | 55          |            |             |            |
| Max. torque (Nm)                         | 140           | 200        | 220        | 290        | 380        | 450        | 550        | 750         | 850        | 1100        | 1400       |
| Rated torque (Nm)                        | 120           | 180        | 200        | 250        | 360        | 400        | 450        | 700         | 700        | 950         | 1250       |
| Output speed (rpm)                       | 20            | 15         |            |            |            | 12         |            | 9,5         | 10         |             | 7          |
| Motor power (kW)                         | 0,55          | 0,5        | 1,1        |            | 1,5        |            |            | 2,2         |            |             |            |
| Limit switch                             | 15            |            | 20         |            |            | 20-40      |            | 10          |            |             |            |
| Brake included                           | No            |            |            |            |            |            | Yes        |             |            |             |            |
| Working voltage (V)                      | 3~230/3~400 V |            |            |            |            |            |            |             |            |             |            |
| Working frequency (Hz)                   | 50            |            |            |            |            |            |            |             |            |             |            |
| Rated current (A)                        | 2             | 2,4        | 3,4        |            | 4,6        |            |            | 6,9         | 7,5        |             | 7,9        |
| Cycles/hour                              | S 3 - 60%     |            |            |            |            |            |            |             |            |             |            |
| Connection cable (n° x mm <sup>2</sup> ) | 5 x 1,5       |            |            |            |            |            |            |             |            |             |            |
| Operating temperature (°C)               | -20 ÷ +40     |            |            |            |            |            |            |             |            |             |            |
| Noise dB(A)                              | <70           |            |            |            |            |            |            |             |            |             |            |
| Protection rating (IP)                   | IP 54         |            |            |            |            |            |            |             |            |             |            |
| Weight (kg)                              | 12,4          | 15,5       | 22         | 24         | 28,9       | 27,7       | 27,7       | 35          | 51,7       | 51,9        | 58         |

## TECHNICAL SPECIFICATIONS RDF 24 RPM SERIES

| Type                                     | RDF-250-24   | RDF-350-24 | RDF-500-24 | RDF-750-24 | RDF-950-24 | RDF-1250-24 | RDF-1400-24 |
|--|--------------|------------|------------|------------|------------|-------------|-------------|
| Hollow shaft Ø (mm)                      | 40           |            |            | 55         |            |             |             |
| Max. torque (nm)                         | 250          | 350        | 500        | 750        | 950        | 1250        | 1400        |
| Rated torque (Nm)                        | 230          | 310        | 450        | 650        | 850        | 1100        | 1250        |
| Output speed (rpm)                       | 24           |            |            |            |            |             |             |
| Motor Power (kW)                         | 1,1          | 1,5        | 2,2        |            | 3          | 4           | 5,5         |
| Limit switch                             | 20-40        |            |            | 40         |            |             |             |
| Brake included                           | Yes          |            |            |            |            |             |             |
| Working voltage (V)                      | 3~230/3~400V |            |            |            |            |             |             |
| Working frequency (Hz)                   | 50           |            |            |            |            |             |             |
| Rated current (A)                        | 4,6          | 4,6        | 4,6        | 7,5        | 8,3        | 10,5        | 15,9        |
| Cycles/hour                              | S3-60%       |            |            |            |            |             |             |
| Connection cable (n° x mm <sup>2</sup> ) | 5 x 1,5      |            |            |            |            |             |             |
| Operating temperature (°C)               | -5 ÷ +40     |            |            |            |            |             |             |
| Noise dB(A)                              | <70          |            |            |            |            |             |             |
| Protection rating (IP)                   | 54           |            |            |            |            |             |             |
| Weight (kg)                              | 24,1         | 29,2       | 32,7       | 51,9       | 61         | 63          | 65          |







# How to choose the ideal motor for sectional doors

## RDF industrial drives

|                                     |                           |                                |                                      | Suitable Cable             |                            |            | Suitable Control unit |                 |          |          |
|-------------------------------------|---------------------------|--------------------------------|--------------------------------------|----------------------------|----------------------------|------------|-----------------------|-----------------|----------|----------|
|                                     |                           |                                |                                      | Code                       |                            |            | Code                  |                 |          |          |
|                                     |                           |                                |                                      | 5 m cable                  | 7 m cable                  | 11 m cable | D-Pro Action          | D-Pro Automatic |          |          |
|                                     |                           | Description                    |                                      | Hand crank (KU)            | Hand chain (KE)            |            |                       |                 |          |          |
|                                     |                           | Type - Nm - Rpm - Hollow shaft | Trade code                           | Trade code                 |                            |            |                       |                 |          |          |
| <b>Rolling shutter drives</b>       | 3 x 400 Vac               | Encoder - 15 turns             | RDF 140 Nm 20 rpm Ø30 mm             | <b>RDF 140.20 EL15 KU</b>  | <b>RDF 140.20 EL15 KE</b>  | CA0174A00  | CA0175A00             | CA0176A00       | NDCC2000 |          |
|                                     |                           |                                | RDF 200 Nm 15 rpm Ø30 mm             | <b>RDF 200.15 EL15 KU</b>  | <b>RDF 200.15 EL15 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Encoder - 20 turns             | RDF 220 Nm 15 rpm Ø30 mm             | <b>RDF 220.15 EL20 KU</b>  | <b>RDF 220.15 EL20 KE</b>  | CA0177A00  | CA0178A00             | CA0179A00       |          | NDCC2100 |
|                                     |                           |                                | RDF 290 Nm 15 rpm Ø30 mm             | <b>RDF 290.15 EL20 KU</b>  | <b>RDF 290.15 EL20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 380 Nm 15 rpm Ø30 mm             | <b>RDF 380.15 EL20 KU</b>  | <b>RDF 380.15 EL20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 380 Nm 15 rpm Ø40 mm             | <b>RDF 380.15 EL20 KU</b>  | <b>RDF 380.15 EL20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 450 Nm 15 rpm Ø40 mm             | <b>RDF 450.15 EL20 KU</b>  | <b>RDF 450.15 EL20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 550 Nm 12 rpm Ø40 mm             | <b>RDF 550.12 EL20 KU</b>  | <b>RDF 550.12 EL20 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Encoder - 40 turns             | RDF 750 Nm 9.5 rpm Ø40 mm with brake | <b>RDF 750.9,5 EL40 KU</b> | <b>RDF 750.9,5 EL40 KE</b> | CA0157A00  | CA0158A00             | CA0159A00       |          | NDCC2000 |
|                                     |                           |                                | RDF 850 Nm 10 rpm Ø55 mm with brake  | <b>RDF 850.10 EL10 KU</b>  | <b>RDF 850.10 EL10 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Encoder - 10 turns             | RDF 1100 Nm 10 rpm Ø55 mm with brake | <b>RDF 1100.10 EL10 KU</b> | <b>RDF 1100.10 EL10 KE</b> | CA0177B00  | CA0178B00             | CA0179B00       |          | NDCC2100 |
|                                     |                           |                                | RDF 1400 Nm 7 rpm Ø55 mm with brake  | <b>RDF 1400.7 EL10 KU</b>  | <b>RDF 1400.7 EL10 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Mechanical - 15 turns          | RDF 140 Nm 20 rpm Ø30 mm             | <b>RDF 140.20 ME15 KU</b>  | <b>RDF 140.20 ME15 KE</b>  | CA0177B00  | CA0178B00             | CA0179B00       | NDCC2000 |          |
|                                     |                           |                                | RDF 200 Nm 15 rpm Ø30 mm             | <b>RDF 200.15 ME15 KU</b>  | <b>RDF 200.15 ME15 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Mechanical - 20 turns          | RDF 220 Nm 15 rpm Ø30 mm             | <b>RDF 220.15 ME20 KU</b>  | <b>RDF 220.15 ME20 KE</b>  | CA0177B00  | CA0178B00             | CA0179B00       | NDCC2100 |          |
|                                     |                           |                                | RDF 290 Nm 15 rpm Ø30 mm             | <b>RDF 290.15 ME20 KU</b>  | <b>RDF 290.15 ME20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 380 Nm 15 rpm Ø30 mm             | <b>RDF 380.15 ME20 KU</b>  | <b>RDF 380.15 ME20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 380 Nm 15 rpm Ø40 mm             | <b>RDF 380.15 ME20 KU</b>  | <b>RDF 380.15 ME20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 450 Nm 15 rpm Ø40 mm             | <b>RDF 450.15 ME20 KU</b>  | <b>RDF 450.15 ME20 KE</b>  |            |                       |                 |          |          |
|                                     |                           |                                | RDF 550 Nm 12 rpm Ø40 mm             | <b>RDF 550.12 ME20 KU</b>  | <b>RDF 550.12 ME20 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Mechanical - 40 turns          | RDF 750 Nm 9.5 rpm Ø40 mm with brake | <b>RDF 750.9,5 ME40 KU</b> | <b>RDF 750.9,5 ME40 KE</b> | CA0177B00  | CA0178B00             | CA0179B00       | NDCC2100 |          |
|                                     |                           |                                | RDF 1400 Nm 7 rpm Ø55 mm with brake  | <b>RDF 1400.7 ME40 KU</b>  | <b>RDF 1400.7 ME40 KE</b>  |            |                       |                 |          |          |
|                                     |                           | Mechanical - 10 turns          | RDF 850 Nm 10 rpm Ø55 mm with brake  | <b>RDF 850.10 ME10 KU</b>  | <b>RDF 850.10 ME10 KE</b>  | CA0177B00  | CA0178B00             | CA0179B00       | NDCC2100 |          |
|                                     |                           |                                | RDF 1100 Nm 10 rpm Ø55 mm with brake | <b>RDF 1100.10 ME10 KU</b> | <b>RDF 1100.10 ME10 KE</b> |            |                       |                 |          |          |
| RDF 1400 Nm 7 rpm Ø55 mm with brake | <b>RDF 1400.7 ME10 KU</b> |                                | <b>RDF 1400.7 ME10 KE</b>            |                            |                            |            |                       |                 |          |          |

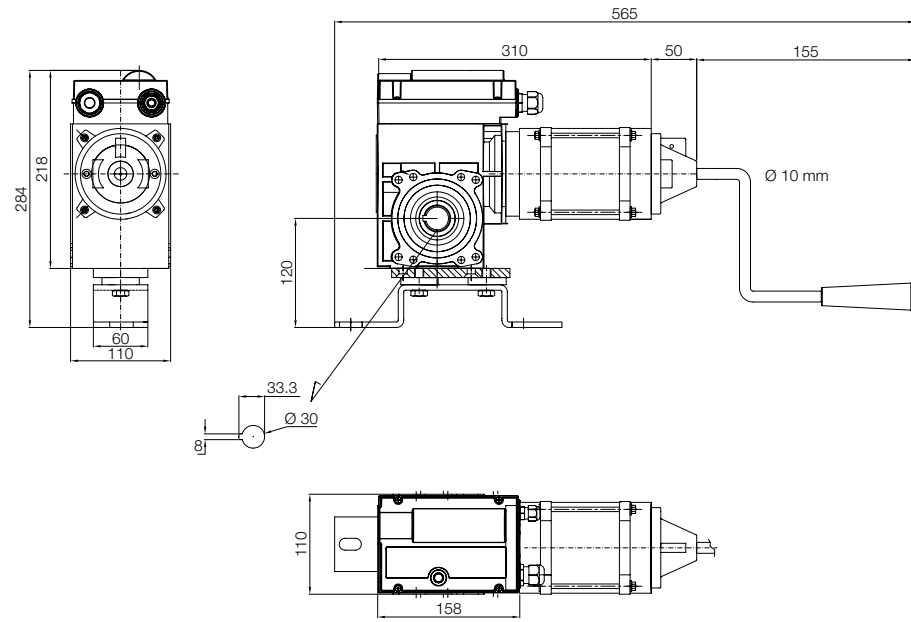


**RDF 24 RPM industrial drives (suitable for chain-driven system, please refer to the Mechanical Accessories section)**

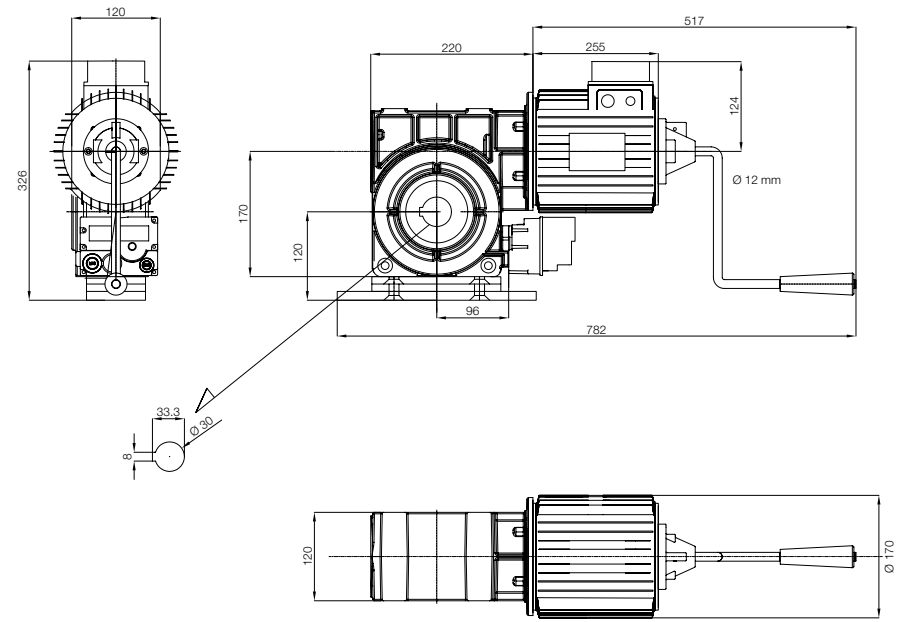
|                                    |                       |                       |                                     |   |   | Suitable Cable             |           |            | Suitable Control unit   |                 |                            |           |           |           |          |          |
|------------------------------------|-----------------------|-----------------------|-------------------------------------|---|---|----------------------------|-----------|------------|---|-----------------|----------------------------|-----------|-----------|-----------|----------|----------|
|                                    |                       |                       |                                     |   |   | Code                       |           |            | Code  |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   | 5 m cable                  | 7 m cable | 11 m cable | D-Pro Action  | D-Pro Automatic |                            |           |           |           |          |          |
| Rolling shutter fast drives 24 rpm | Power supply          | Limit switch type     | Description                         | Hand crank (KU)   | Hand chain (KE)   | 5 m cable                  | 7 m cable | 11 m cable | D-Pro Action  | D-Pro Automatic |                            |           |           |           |          |          |
|                                    |                       |                       | Type - Nm - Rpm - Hollow shaft      | Trade Code  | Trade code  |                            |           |            |   |                 |                            |           |           |           |          |          |
| 3 x 400 Vac                        | Encoder - 20 turns    | Encoder - 20 turns    | RDF 250 Nm 24 rpm Ø40 mm with brake | <b>RDF 250.24 EL20 KU</b>   | <b>RDF 250.24 EL20 KE</b>   | CA0177A00                  | CA0178A00 | CA0179A00  | NDCC2100  | NDCC1000        |                            |           |           |           |          |          |
|                                    |                       |                       | RDF 350 Nm 24 rpm Ø40 mm with brake | <b>RDF 350.24 EL20 KU</b>   | <b>RDF 350.24 EL20 KE</b>   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       | RDF 500 Nm 24 rpm Ø40 mm with brake | <b>RDF 500.24 EL20 KU</b>   | <b>RDF 500.24 EL20 KE</b>   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       | Encoder - 40 turns    | Encoder - 40 turns                  | RDF 250 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 250.24 EL40 KU</b>   |                            |           |            |   |                 | <b>RDF 250.24 EL40 KE</b>  |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 350 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 350.24 EL40 KU</b>   |                            |           |            |   |                 | <b>RDF 350.24 EL40 KE</b>  |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 500 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 500.24 EL40 KU</b>   |                            |           |            |   |                 | <b>RDF 500.24 EL40 KE</b>  |           |           |           |          |          |
|                                    |                       |                       | Encoder - 40 turns                  | RDF 750 Nm 24 rpm Ø 55 mm with brake  | <b>RDF 750.24 EL40 KU</b>   |                            |           |            |   |                 | <b>RDF 750.24 EL40 KE</b>  |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 950 Nm 24 rpm Ø 55 mm with brake  | <b>RDF 950.24 EL40 KU</b>   |                            |           |            |   |                 | <b>RDF 950.24 EL40 KE</b>  |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 1250 Nm 24 rpm Ø 55 mm with brake   | <b>RDF 1250.24 EL40 KU</b>  |                            |           |            |   |                 | <b>RDF 1250.24 EL40 KE</b> |           |           |           |          |          |
|                                    |                       | Mechanical - 20 turns | Mechanical - 20 turns               | RDF 250 Nm 24 rpm Ø40 mm with brake   | <b>RDF 250.24 ME20 KU</b>   |                            |           |            |   |                 | <b>RDF 250.24 ME20 KE</b>  | CA0177B00 | CA0178B00 | CA0179B00 | NDCC2100 | NDCC1000 |
|                                    |                       |                       |                                     | RDF 350 Nm 24 rpm Ø40 mm with brake   | <b>RDF 350.24 ME20 KU</b>   |                            |           |            |   |                 | <b>RDF 350.24 ME20 KE</b>  |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 500 Nm 24 rpm Ø40 mm with brake   | <b>RDF 500.24 ME20 KU</b>   |                            |           |            |   |                 | <b>RDF 500.24 ME20 KE</b>  |           |           |           |          |          |
|                                    | Mechanical - 40 turns |                       | Mechanical - 40 turns               | RDF 250 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 250.24 ME40 KU</b>   | <b>RDF 250.24 ME40 KE</b>  |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 350 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 350.24 ME40 KU</b>   | <b>RDF 350.24 ME40 KE</b>  |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 500 Nm 24 rpm Ø 40 mm with brake  | <b>RDF 500.24 ME40 KU</b>   | <b>RDF 500.24 ME40 KE</b>  |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       | Mechanical - 40 turns               | RDF 750 Nm 24 rpm Ø 55 mm with brake  | <b>RDF 750.24 ME40 KU</b>   | <b>RDF 750.24 ME40 KE</b>  |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 950 Nm 24 rpm Ø 55 mm with brake  | <b>RDF 950.24 ME40 KU</b>   | <b>RDF 950.24 ME40 KE</b>  |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     | RDF 1250 Nm 24 rpm Ø 55 mm with brake   | <b>RDF 1250.24 ME40 KU</b>  | <b>RDF 1250.24 ME40 KE</b> |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |  |  |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |
|                                    |                       |                       |                                     |   |   |                            |           |            |   |                 |                            |           |           |           |          |          |

MODEL:

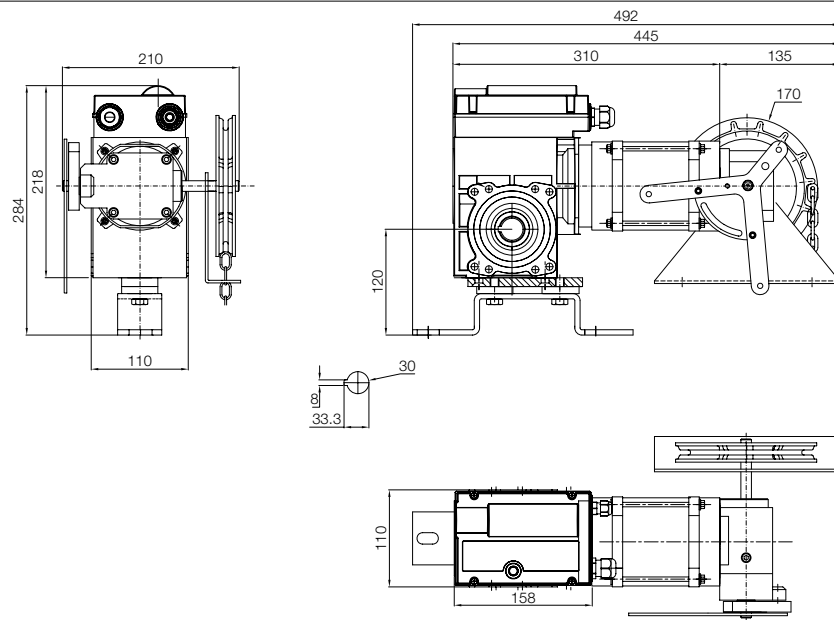
RDF-140-20-KU



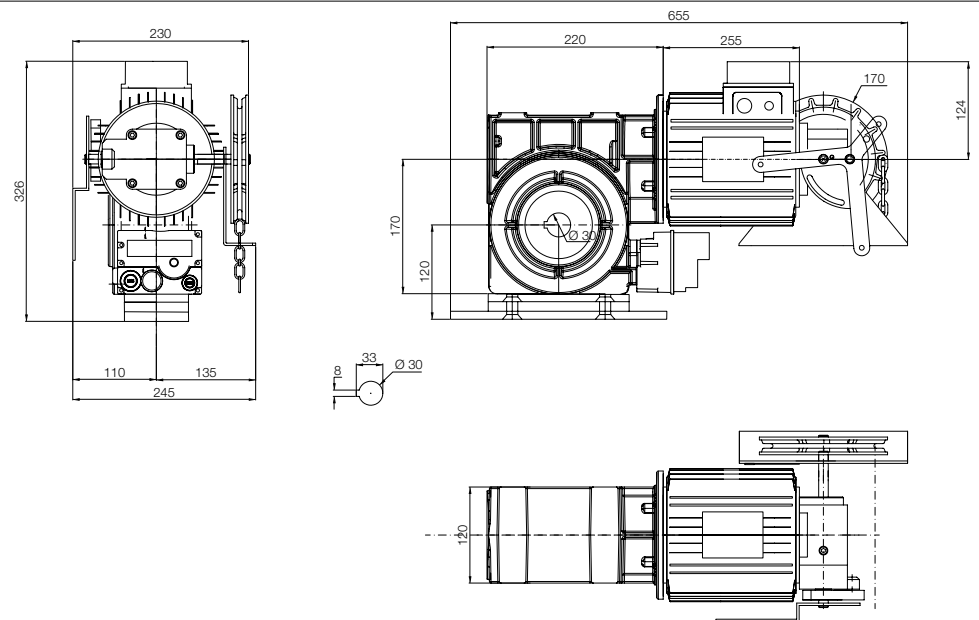
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RDF-140-20-KE2



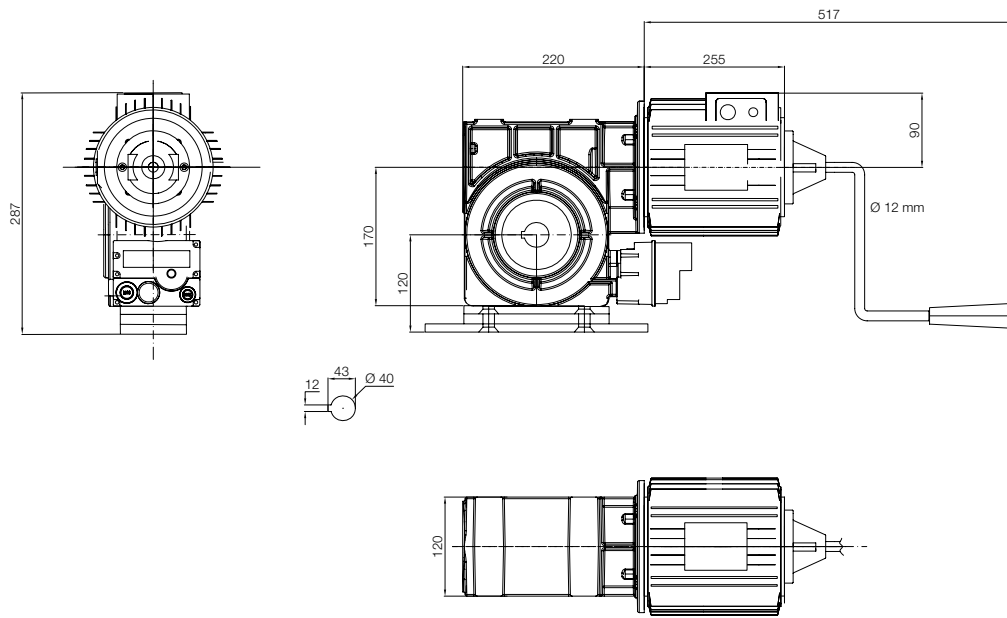
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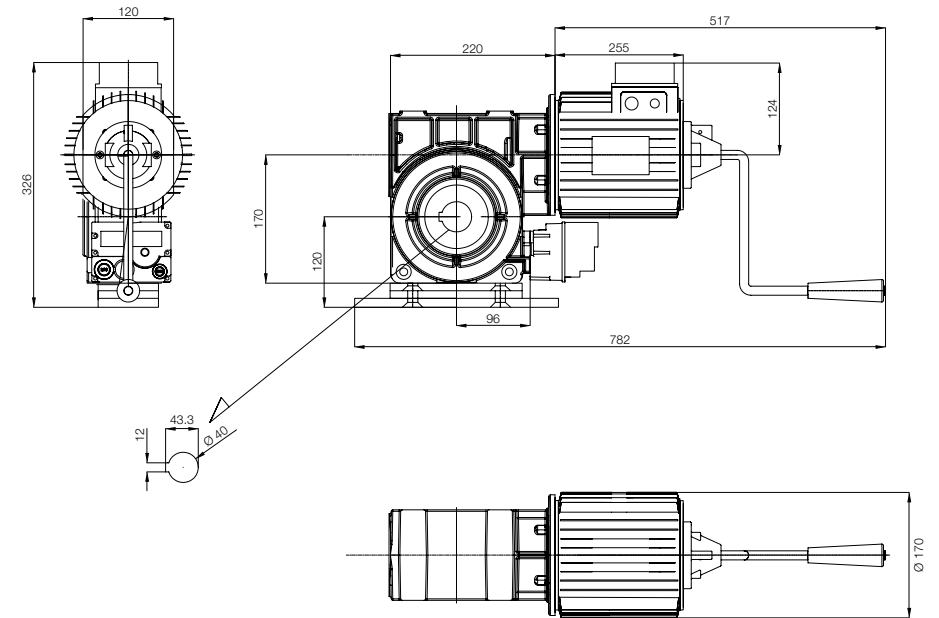


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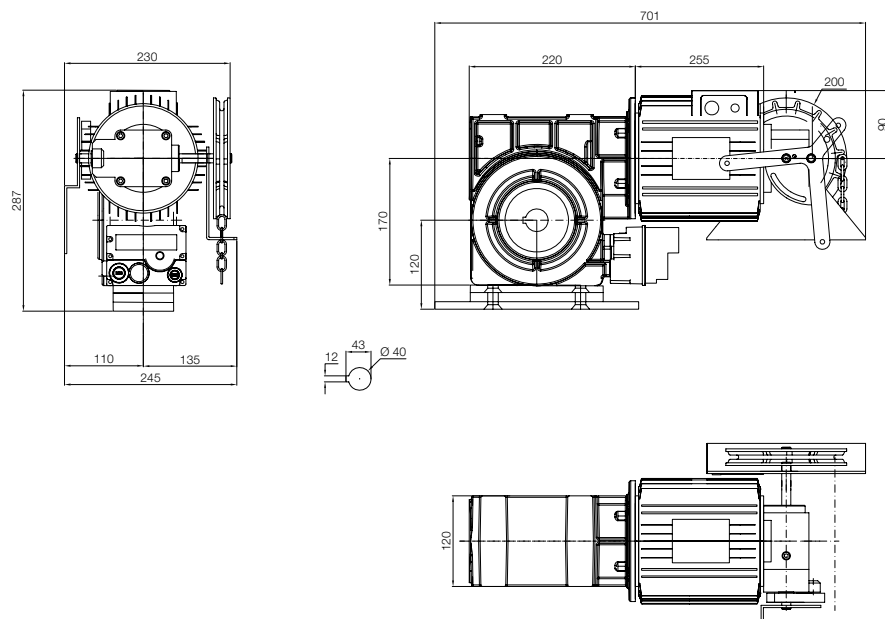
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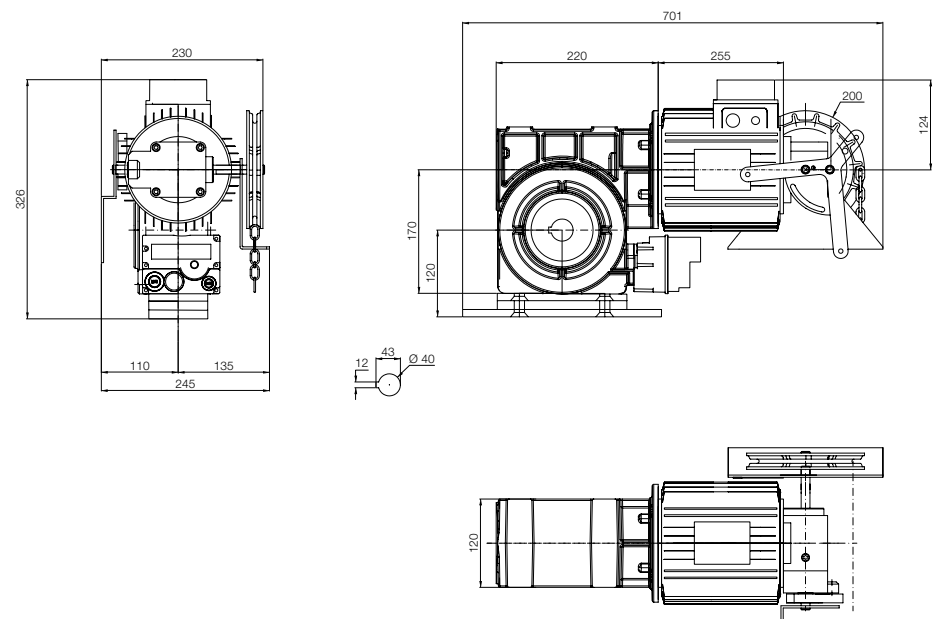
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**RDF-380/450-15-KE2**

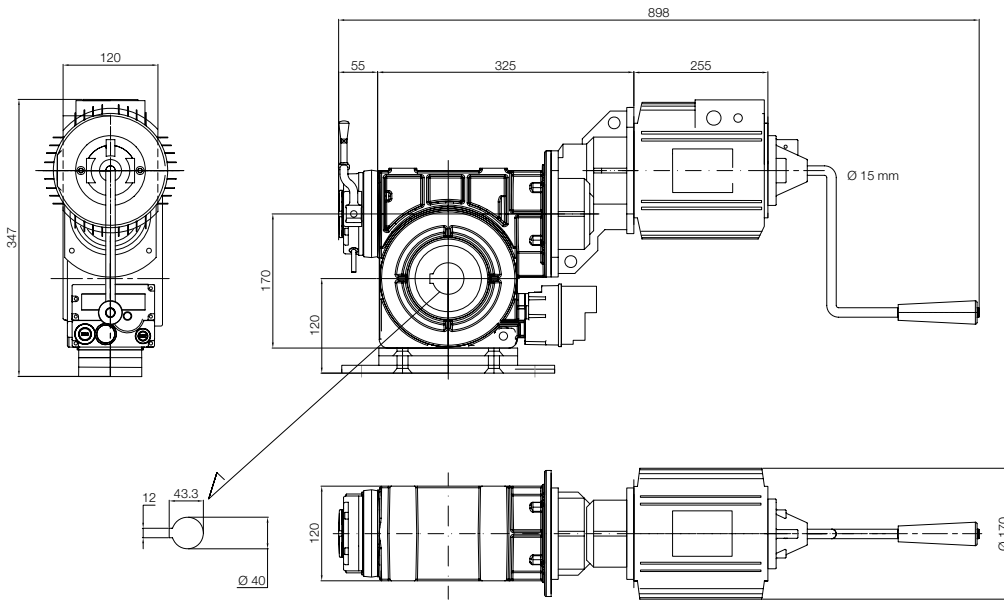


**RDF-550-12-KE2**

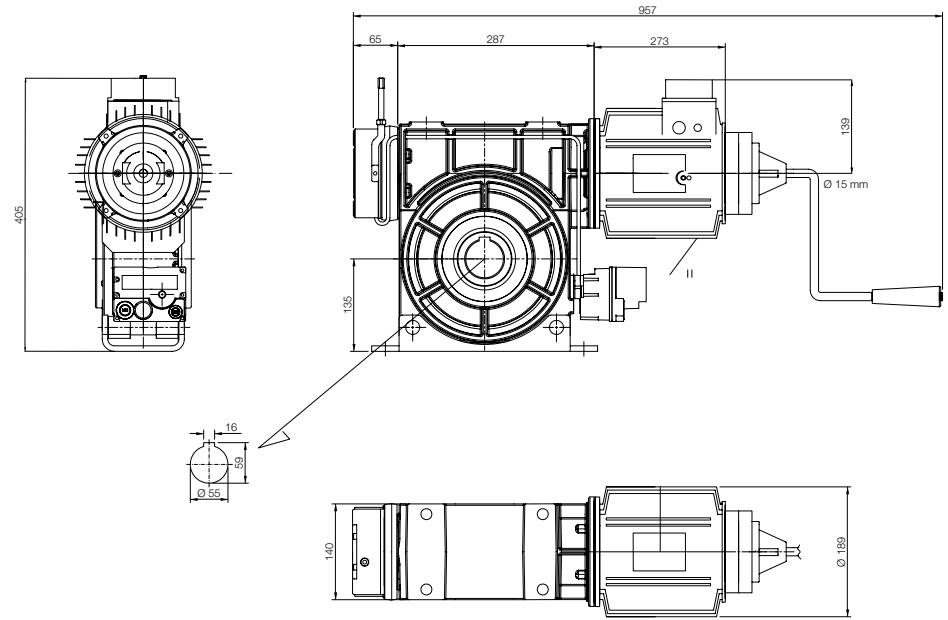


**MODEL:**

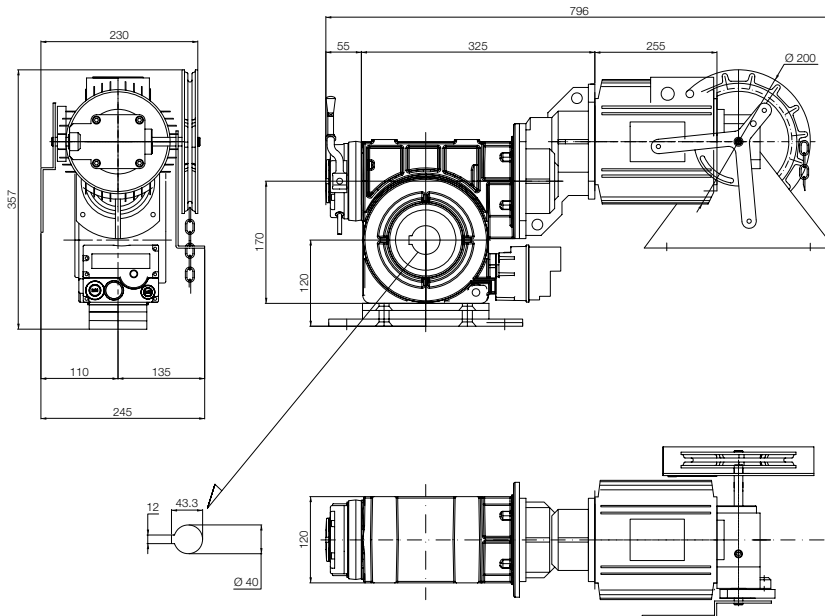
**RDF-750-9,5-KU**



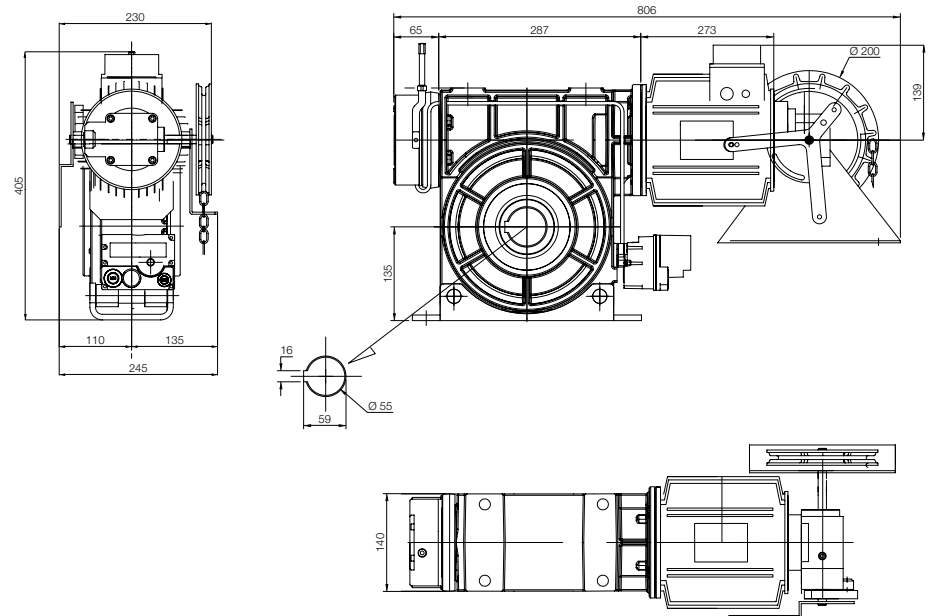
**RDF-850/1100-10-KU**



**RDF-750-9,5-KE2**

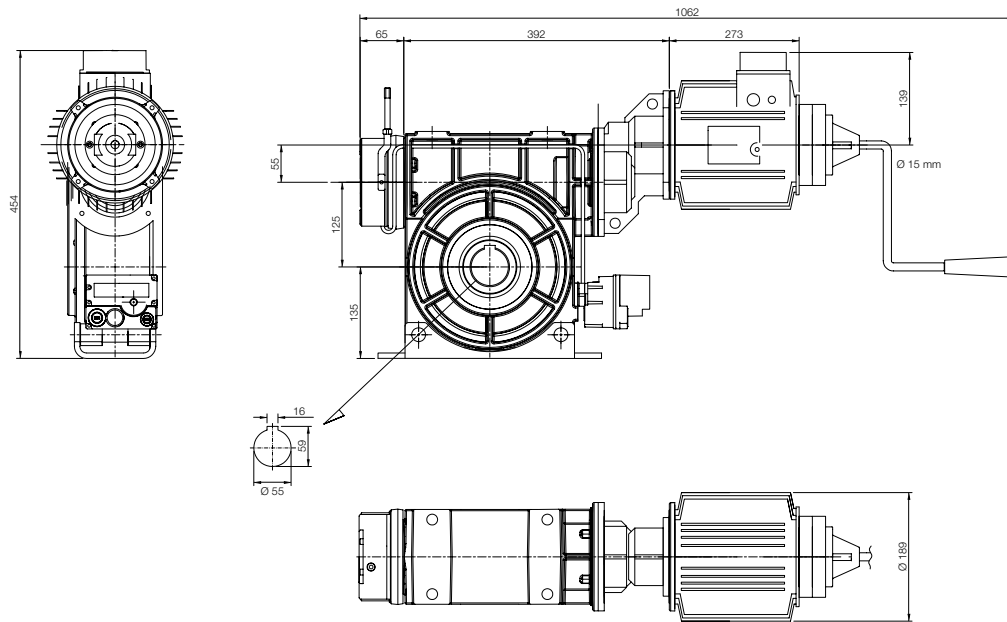


**RDF-850/1100-10-KE2**

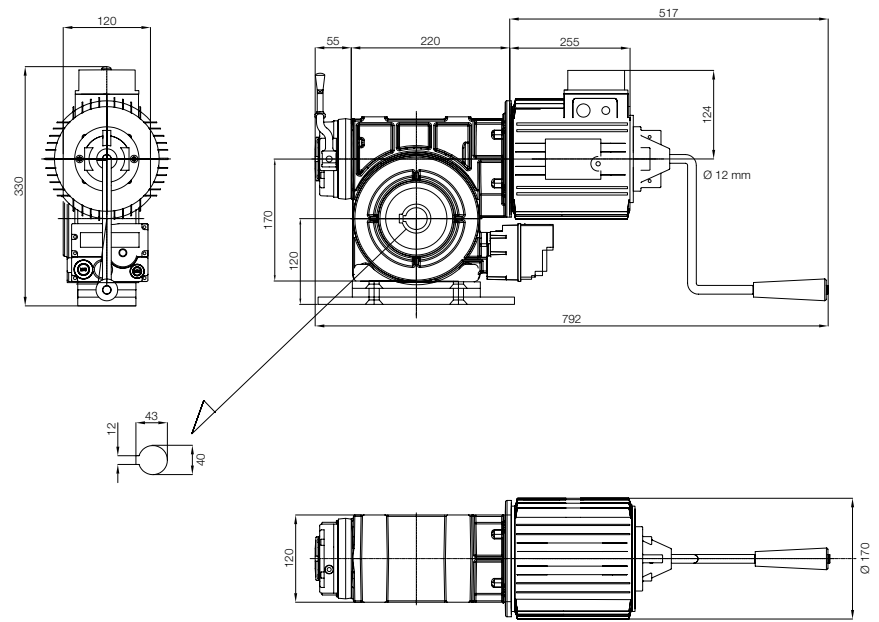


**MODEL:**

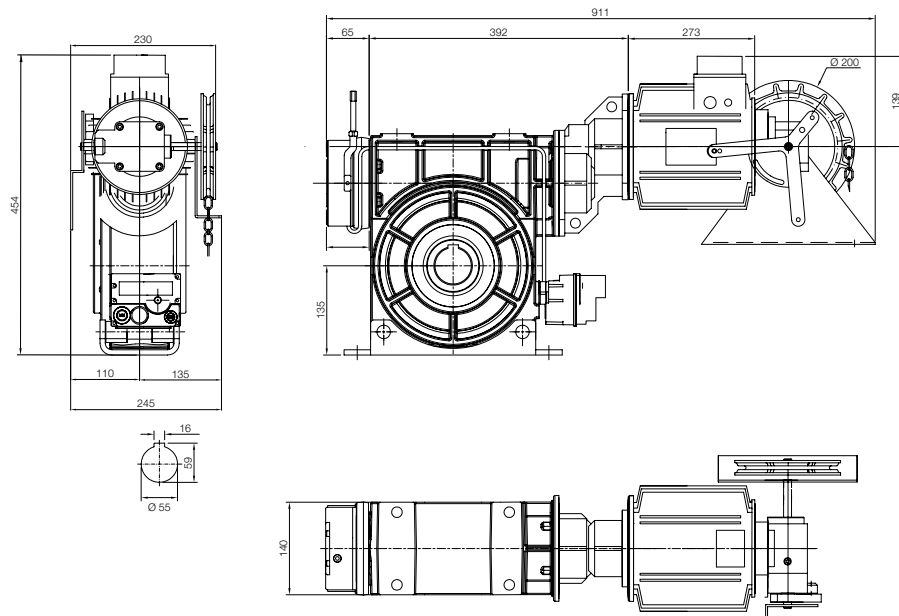
**RDF-1400-7-KU**



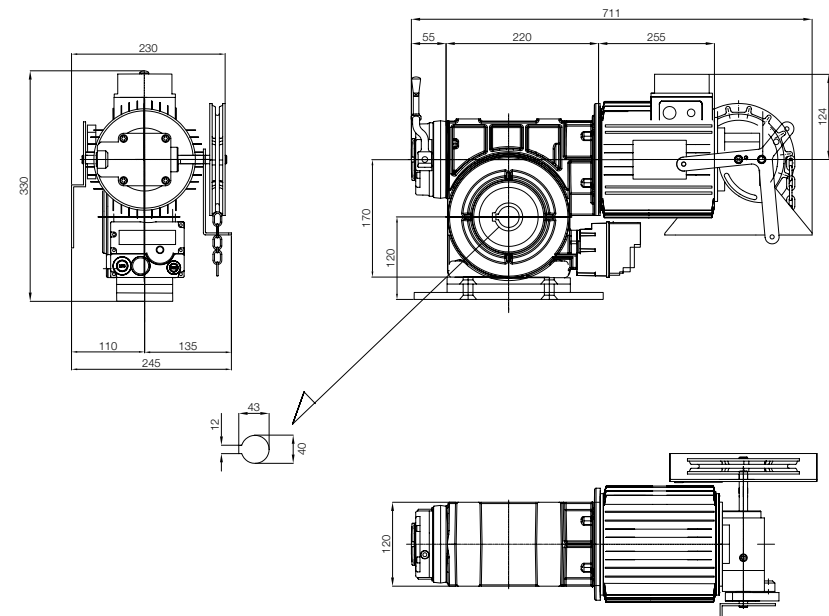
**RDF-250-24-KU**



**RDF-1400-7-KE2**

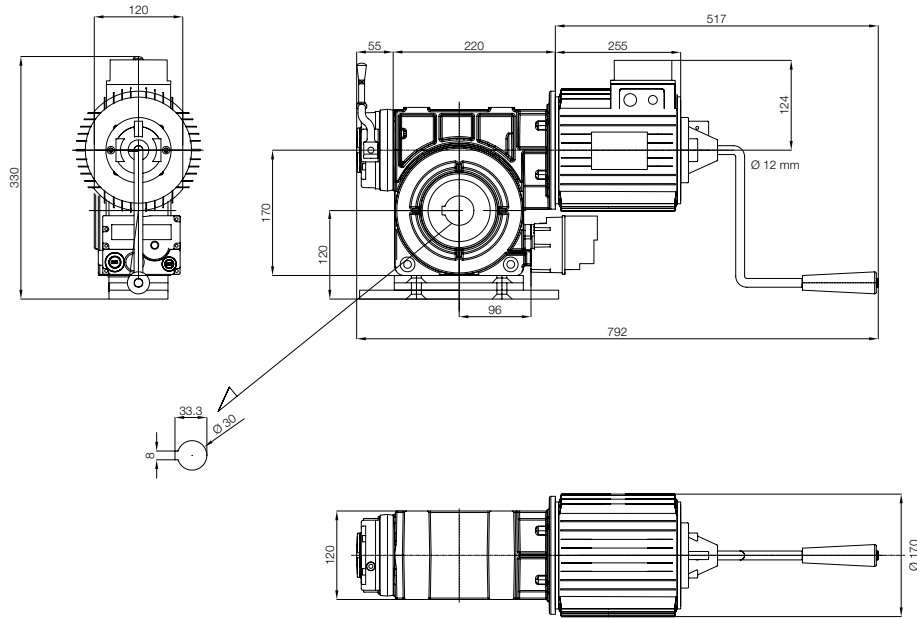


**RDF-250-24-KE2**

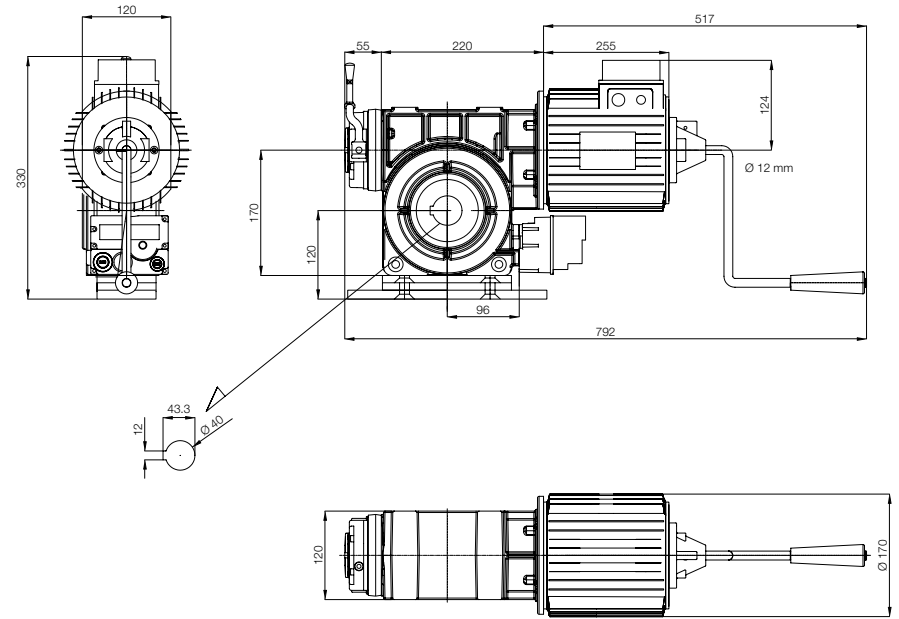


**MODEL:**

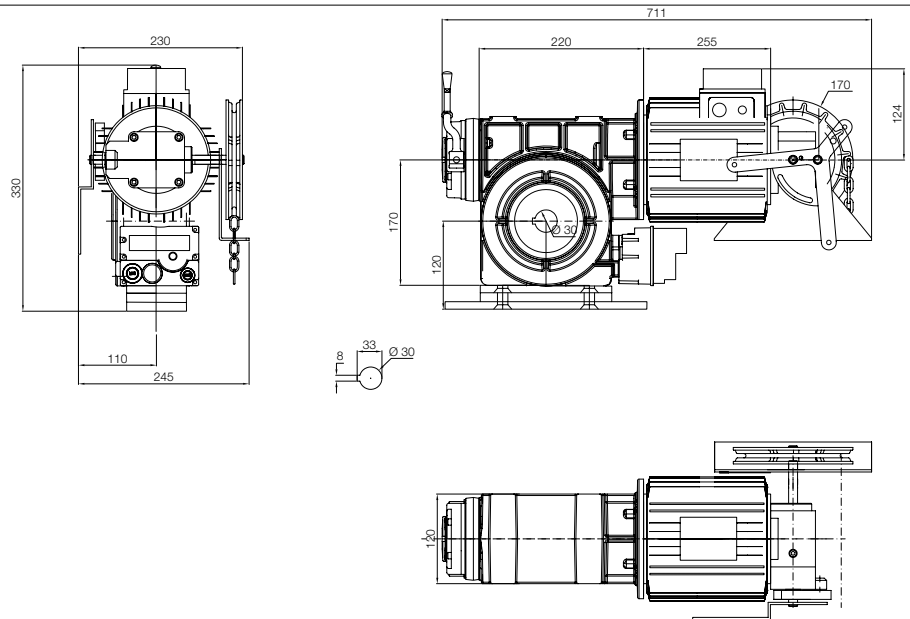
**RDF-350-24-KU**



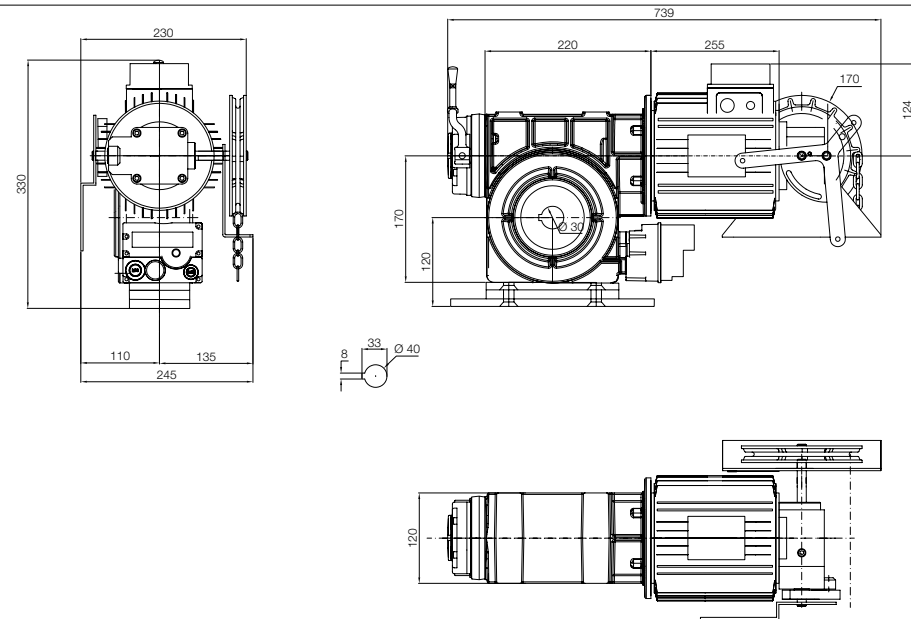
**RDF-500-24-KU**



**RDF-350-24-KE2**



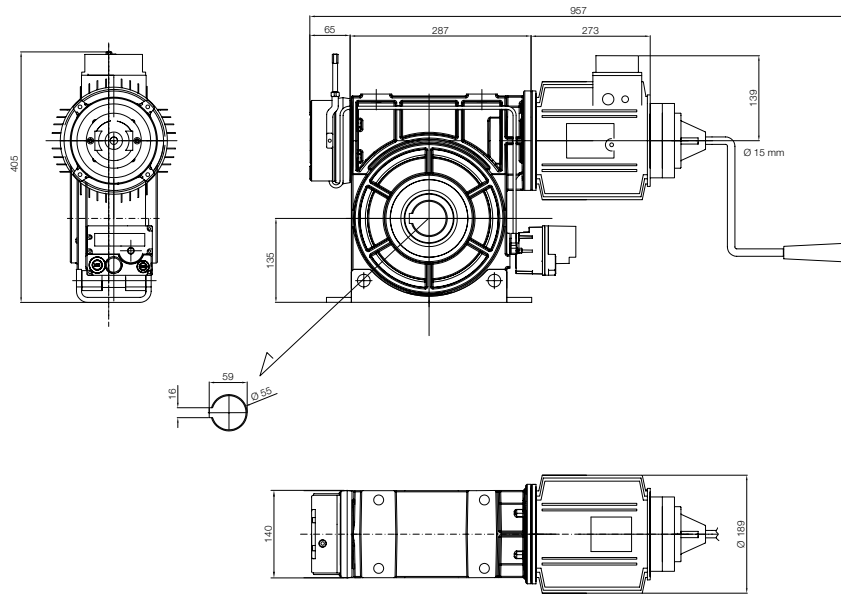
**RDF-500-24-KE2**



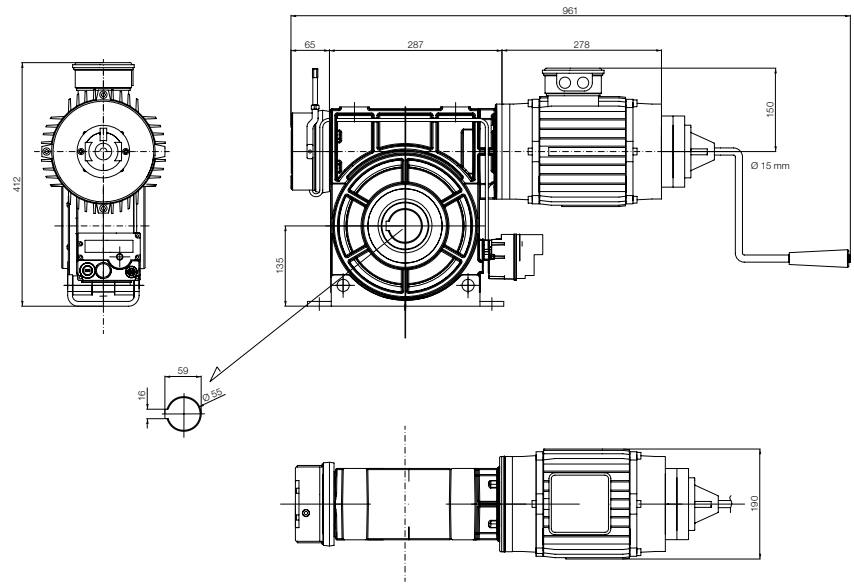


MODEL:

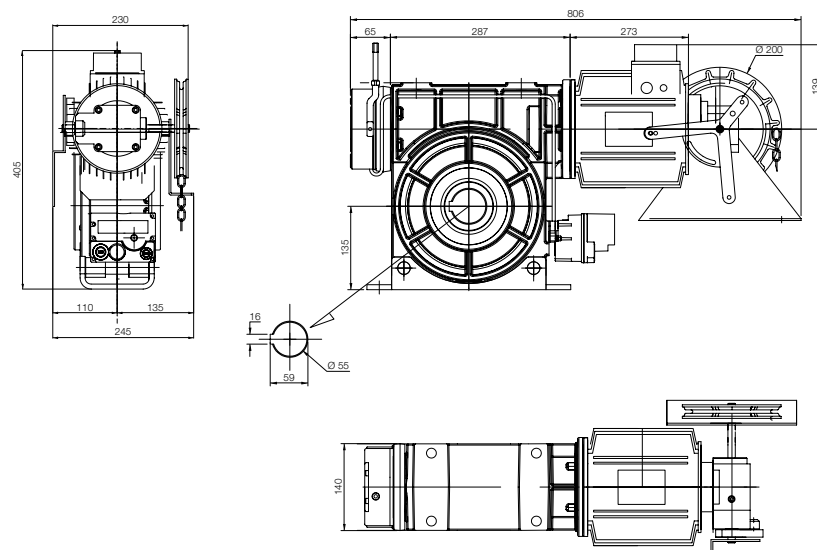
RDF-750-24-KU



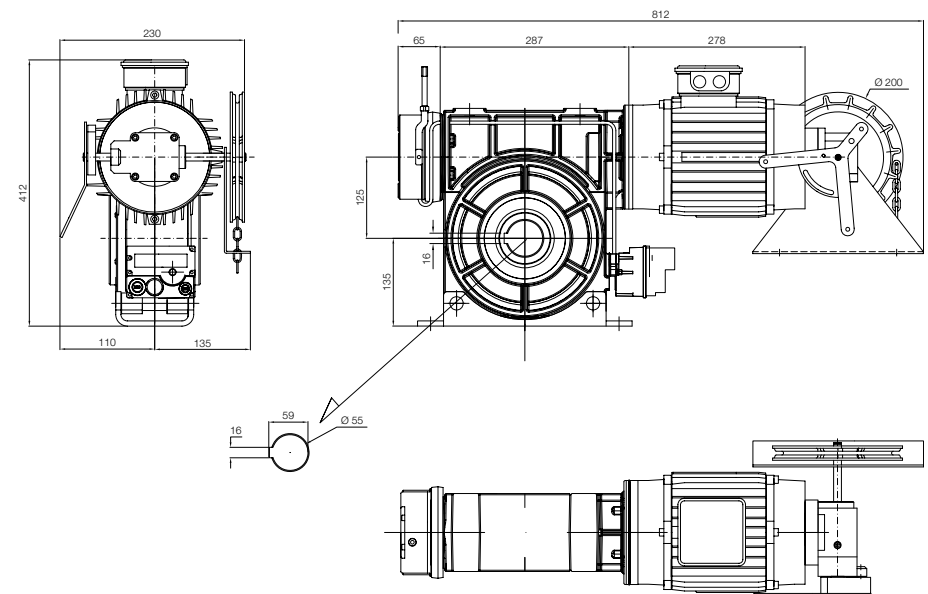
RDF-950-24-KU



RDF-750-24-KE2



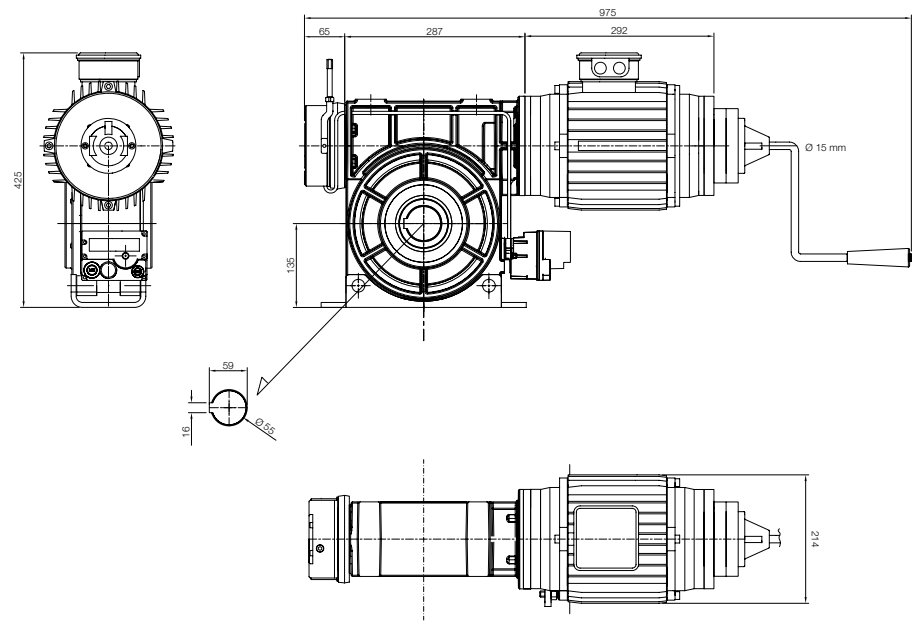
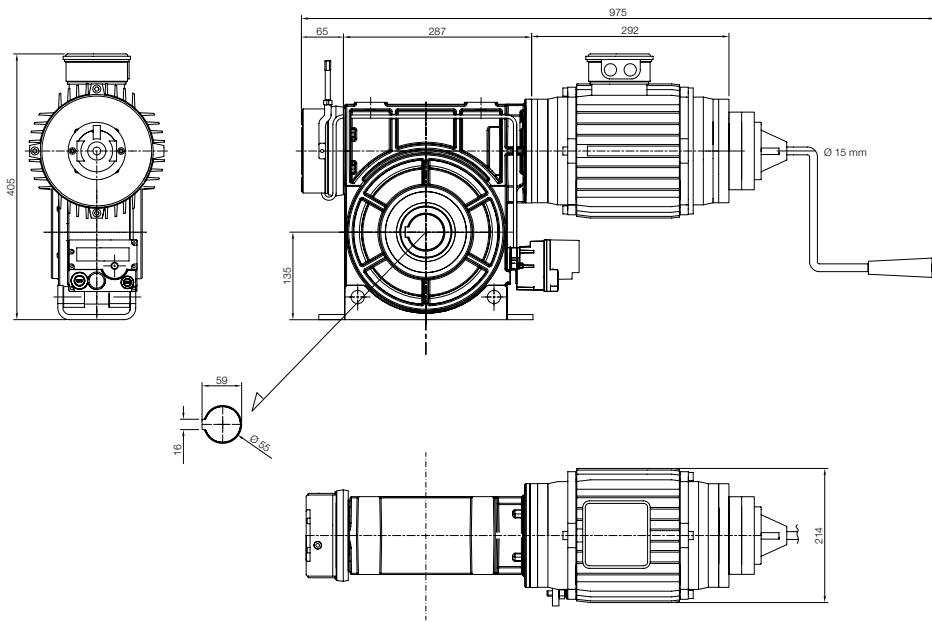
RDF-950-24-KE2



MODEL:

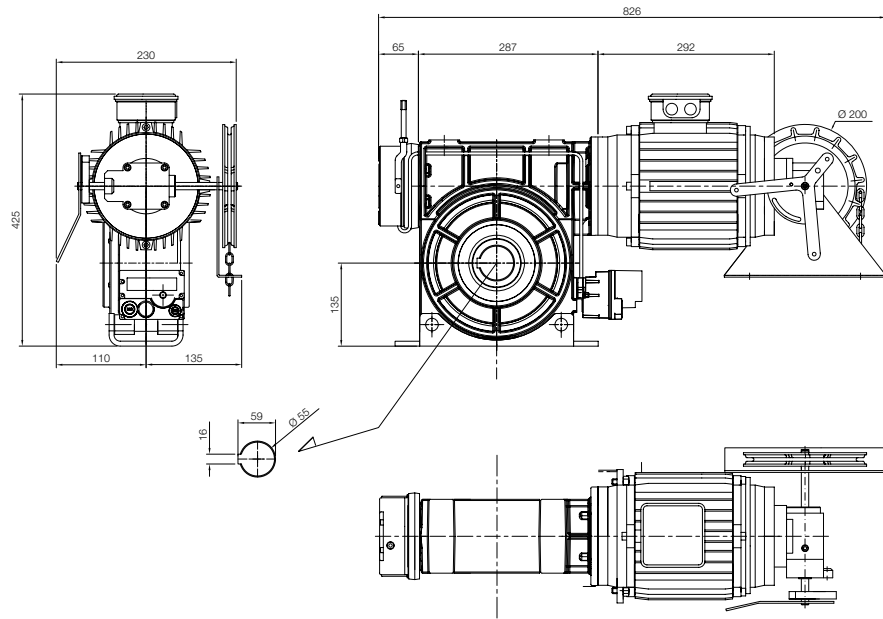
RDF-1250-24-KU

RDF-1400-24-KU

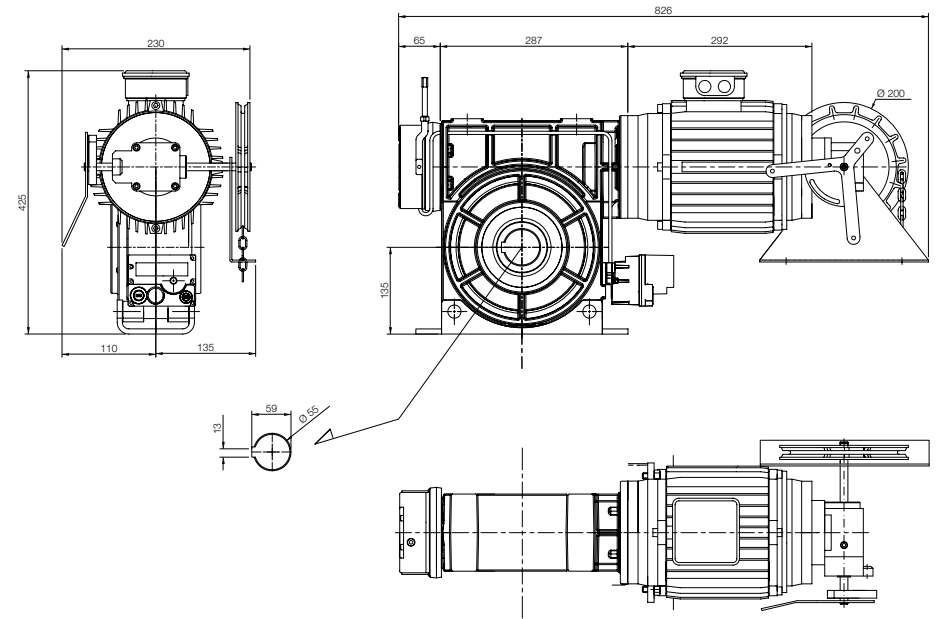


MODEL:

RDF-1250-24-KE2



RDF-1400-24-KE2

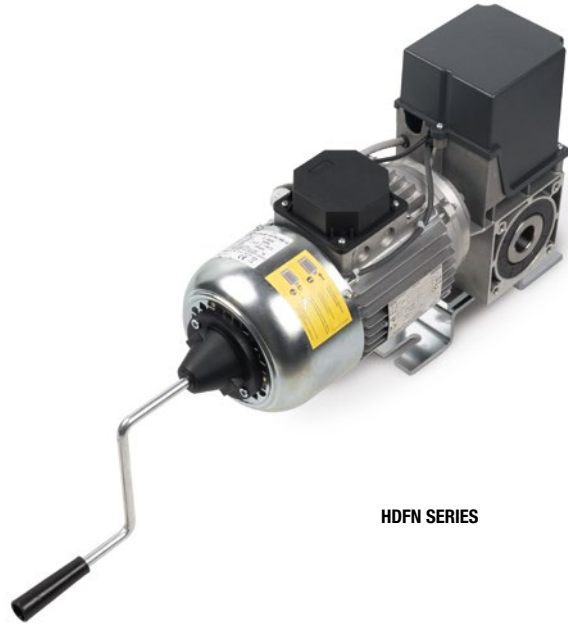






# HDFN / HDFNI

For high speed doors



HDFN SERIES



HDFNI SERIES

**Electromechanical gearmotor for high speed doors, with or without integrated inverter, electronic limit switches, crank emergency (KU series), integrated anti-fallback device, brake and fixing bracket.**

**Simple installation**

The HDFN/HDFNI series is installed directly on the shaft of the door (Ø 25 mm, Ø 30 mm and Ø 40 mm). The HDFNI gearmotors are equipped with a pre-wired cable and Plug&Play connection with D-Pro family control units.

**Compact and efficient:**

torque up to 300 Nm, speed up to 140 rpm at 50 Hz.

**Practical:**

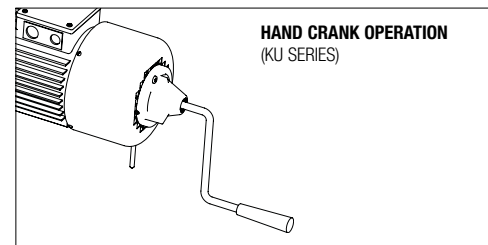
release available with crank emergency.

**High safety** thanks to the integrated anti-fallback safety system and possibility of connecting safety devices and optical or resistive 8.2 kΩ sensitive bars, the gearmotors are compliant with the most recent European standards and directives.

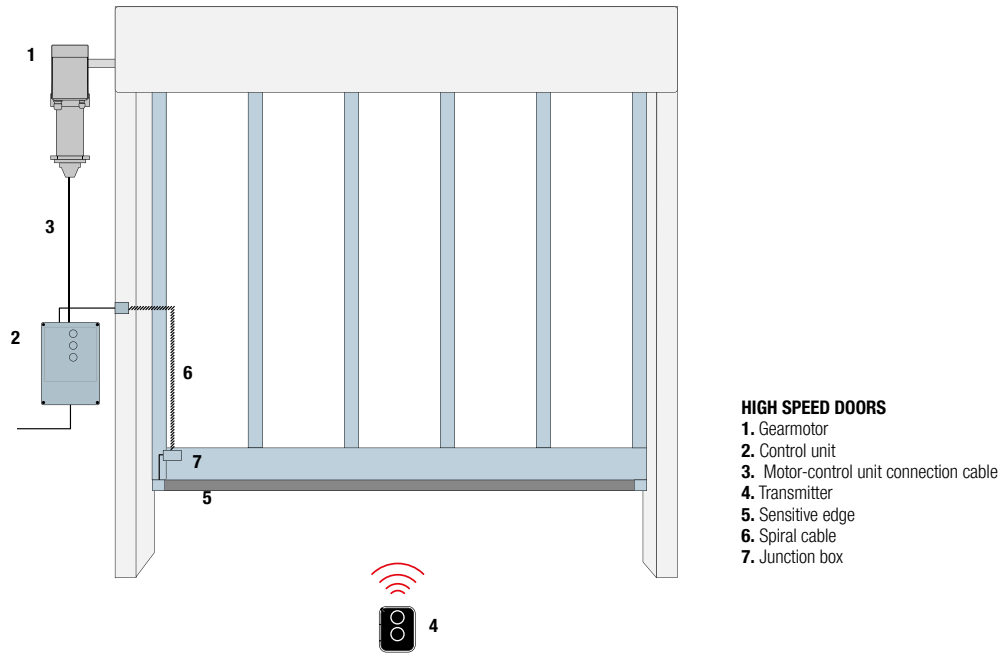
**Total Speed Control via Inverter:**

All three phase High Speed gearmotors are compatible with 230V single phase inverter. Acceleration and deceleration phases can be controlled. Besides door opening and closing speed can be regulated. Nice inverter is easy to install thanks to plug&play connectors to connect it to the control unit. Inverter can also be installed on the motor itself.

**EMERGENCY OPERATIONS**



**INSTALLATION DIAGRAM**









**TECHNICAL SPECIFICATIONS**

| Type                        | HDFN-35-140 | HDFN-45-95 | HDFN-60-140 | HDFN-80-90 | HDFN-160-95 | HDFNI-35-140 | HDFNI-45-90 | HDFNI-60-140 | HDFNI-80-90 | HDFNI-120-140 | HDFNI-160-95 | HDFNI-220-70 | HDFNI-300-45 |
|-----------------------------|-------------|------------|-------------|------------|-------------|--------------|-------------|--------------|-------------|---------------|--------------|--------------|--------------|
| Hollow shaft Ø (mm)         | 25/25,4/30  |            |             |            | 30/40       | 25/25,4/30   |             |              |             | 30/40         |              |              |              |
| Max. torque (Nm)            | 35          | 45         | 60          | 80         | 160         | 35           | 45          | 60           | 80          | 120           | 160          | 220          | 300          |
| Rated torque (Nm)           | 27          | 36         | 40          | 60         | 100         | 30           | 36          | 45           | 60          | 100           | 85           | 200          | 240          |
| Output speed (rpm)          | 140         | 95         | 140         | 90         | 95          | 140          | 90          | 140          | 90          | 140           | 95           | 70           | 45           |
| Motor Power (kW)            | 0,75        | 0,55       | 1,1         | 0,9        | 2,2         | 1,1          | 0,9         | 1,1          | 0,9         | 2,2           |              |              |              |
| Limit switch                | 15          |            |             |            | 20          | 15           |             |              |             | 20            |              |              |              |
| Working voltage (V)         | 3~230/3~400 |            |             |            |             | 1 x 230      |             |              |             |               |              |              |              |
| Working frequency (Hz)      | 50          |            |             |            |             | 50           |             |              |             |               |              |              |              |
| Rated current (A)           | 1,9         | 1,8        | 2,6         | 9,7        | 4           | -            | 4,8         |              | 15,8        | 15,6          | 12,7         | 15,5         |              |
| Cycles/hour                 | S3-60%      |            |             |            |             | S3-60%       |             |              |             |               |              |              |              |
| Connection cable (n° x mm²) | 5x1,5       |            |             |            |             | 5x1,5        |             |              |             |               |              |              |              |
| Operating temperature (°C)  | -5/+40°C    |            |             |            |             | -5/+40°C     |             |              |             |               |              |              |              |
| Noise dB(A)                 | <70         |            |             |            |             | <70          |             |              |             |               |              |              |              |
| Protection rating (IP)      | 54          |            |             |            |             | 54           |             |              |             |               |              |              |              |
| Weight (kg)                 | 16          | 17         | 30          | 35         | 18          | 19           | 32          | 37           |             |               |              |              |              |

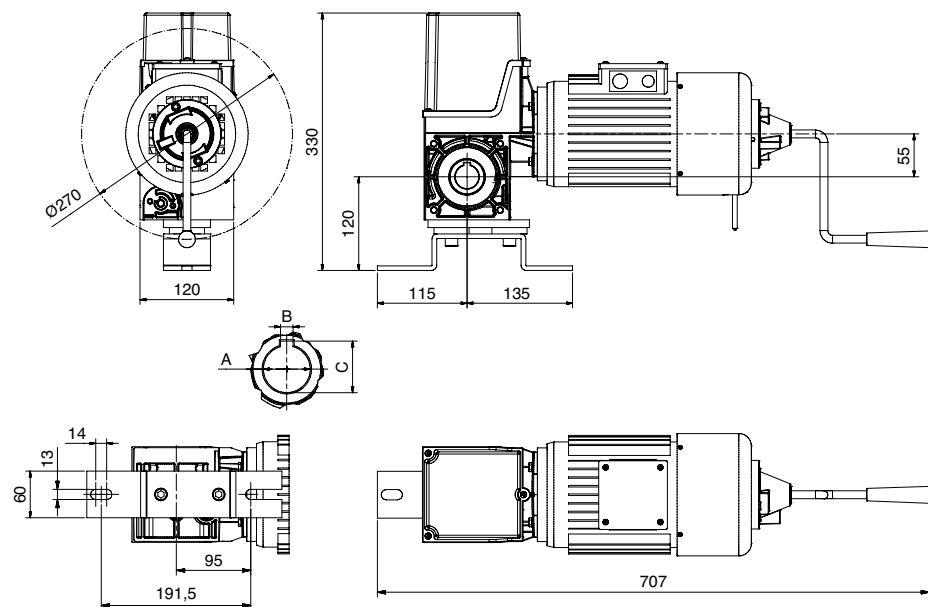
# How to choose the ideal motor for high speed doors

## Gear Type HDFN/HDFNI

| For High Speed Doors - Gear Type HDFN                             |  |  |                                 |                     |  |   |           |  |           |              |   |   |
|---|--|--|---------------------------------|---------------------|--|---|-----------|--|-----------|--------------|---|---|
|   |  |  |                                 |                     |    |   |           | <b>Suitable Cable</b><br>Code          |           |              | <b>Suitable Control unit</b><br>Code  |   |
|   |  | <b>Description</b>                     |                                 |                     | <b>Hand crank (KU)</b>   |   |           | 5 m cable                              | 7 m cable | 11 m cable   |    |    |
| Power supply  | Limit switch type                      | Type - Nm - Rpm - Hollow shaft         | Trade Code                      | Article number      |  |   |           |  |           | D-Pro Action | D-Pro Automatic   |   |
| High Speed drives   | Encoder - 15 turns                     | <b>Hollow shaft diameter selection</b> |                                 |                     | Ø 25 mm Ø 25,4 mm Ø 30 mm  |   |           | CA0174A00                              | CA0175A00 | CA0176A00    | NDCC2100  | NDCC1000  |
|   |  | HDFN 35 Nm 140 rpm with brake          | HDFN 35.140 EL15 KU             | X                   | X  | X |           |  |           |              |   |   |
|   |  | HDFN 45 Nm 95 rpm with brake           | HDFN 45.95 EL15 KU              | X                   | X  | X |           |  |           |              |   |   |
|   |  | HDFN 60 Nm 140 rpm with brake          | HDFN 60.140 EL15 KU             | X                   | X  | X |           |  |           |              |   |   |
|   |  |  | HDFN 80 Nm 90 rpm mm with brake | HDFN 80.90 EL15 KU  | X  | X | X         |  |           |              |   |   |
|   | Encoder - 20 turns                     | <b>Hollow shaft diameter selection</b> |                                 |                     | Ø 30 mm Ø 40 mm  |   |           | CA0177A00                              | CA0178A00 | CA0179A00    |   |   |
|   |  | HDFN 160 Nm 95 rpm with brake          | HDFN 160.95 EL15 KU             | X                   | X  |   |           |  |           |              |   |   |
|   |  | <b>Hollow shaft diameter selection</b> |                                 |                     | Ø 25 mm Ø 25,4 mm Ø 30 mm  |   |           | CA0174B00                              | CA0175B00 | CA0176B00    |   |   |
|   |  | Mechanical - 15 turns                  | HDFN 35 Nm 140 rpm with brake   | HDFN 35.140 ME15 KU | X  | X | X         |  |           |              |   |   |
|   | HDFN 45 Nm 95 rpm with brake           |  | HDFN 45.95 ME15 KU              | X                   | X  | X |           |  |           |              |   |   |
|   | HDFN 60 Nm 140 rpm with brake          |  | HDFN 60.140 ME15 KU             | X                   | X  | X |           |  |           |              |   |   |
|   | HDFN 80 Nm 90 rpm with brake           |  | HDFN 80.90 ME15 KU              | X                   | X  | X |           |  |           |              |   |   |
| Mechanical - 20 turns   | <b>Hollow shaft diameter selection</b> |  |                                 | Ø 30 mm Ø 40 mm     |  |   | CA0177B00 | CA0178B00                              | CA0179B00 |              |   |   |
|   | HDFN 160 Nm 95 rpm with brake          | HDFN 160.95 ME15 KU                    | X                               | X                   |  |   |           |  |           |              |   |   |
| For High Speed Doors - With Frequency Converter - Gear Type HDFNI |  |  |                                 |                     |  |   |           |  |           |              |   |   |
|   |  |  |                                 |                     |  |   |           | <b>Cable already connected</b><br>Code |           |              | <b>Suitable Control unit</b><br>Code  |   |
|   |  | <b>Description</b>                     |                                 |                     | <b>Hand crank (KU)</b>   |   |           | 5 m cable                              | 7 m cable | 11 m cable   |  |  |
| Power supply  | Limit switch type                      | Type - Nm - Rpm - Hollow shaft         | Trade Code                      | Article number      |  |   |           |  |           | D-Pro Action | D-Pro Automatic   |   |
| High Speed drives with frequency converter                        | Encoder - 15 turns                     | <b>Hollow shaft diameter selection</b> |                                 |                     | Ø 25 mm Ø 25,4 mm Ø 30 mm  |   |           | Ø 25 mm                                | Ø 25,4 mm | Ø 30 mm      | Not compatible  | NDCC1100  |
|   |  | HDFNI 35 Nm 140 rpm with brake         | HDFNI 35.140 EL15 KU            | X                   | X  | X | X         |  |           |              |   |   |
|   |  | HDFNI 45 Nm 90 rpm with brake          | HDFNI 45.90 EL15 KU             | X                   | X  | X |           | X                                      |           |              |   |   |
|   |  | HDFNI 60 Nm 140 rpm with brake         | HDFNI 60.140 EL15 KU            | X                   | X  | X |           | X                                      |           |              |   |   |
|   |  |  | HDFNI 80 Nm 90 rpm with brake   | HDFNI 80.90 EL15 KU | X  | X | X         |  | X         |              |   |   |
|   | Encoder - 20 turns                     | <b>Hollow shaft diameter selection</b> |                                 |                     | Ø 30 mm Ø 40 mm  |   |           | Ø 30 mm                                | Ø 40 mm   |              |   |   |
|   |  | HDFNI 120 Nm 140 rpm with brake        | HDFNI 120.140 EL20 KU           | X                   | X  |   |           | X                                      |           |              |   |   |
|   |  | HDFNI 160 Nm 95 rpm with brake         | HDFNI 160.95 EL20 KU            | X                   | X  |   |           | X                                      |           |              |   |   |
|   |  | HDFNI 220 Nm 70 rpm with brake         | HDFNI 220.70 EL20 KU            | X                   | X  |   |           | X                                      |           |              |   |   |
|   |  | HDFNI 300 Nm 45 rpm with brake         | HDFNI 300.45 EL20 KU            | X                   | X  |   |           | X                                      |           |              |   |   |
|   |  |  |                                 |                     |  |   |           | X                                      |           |              |   |   |

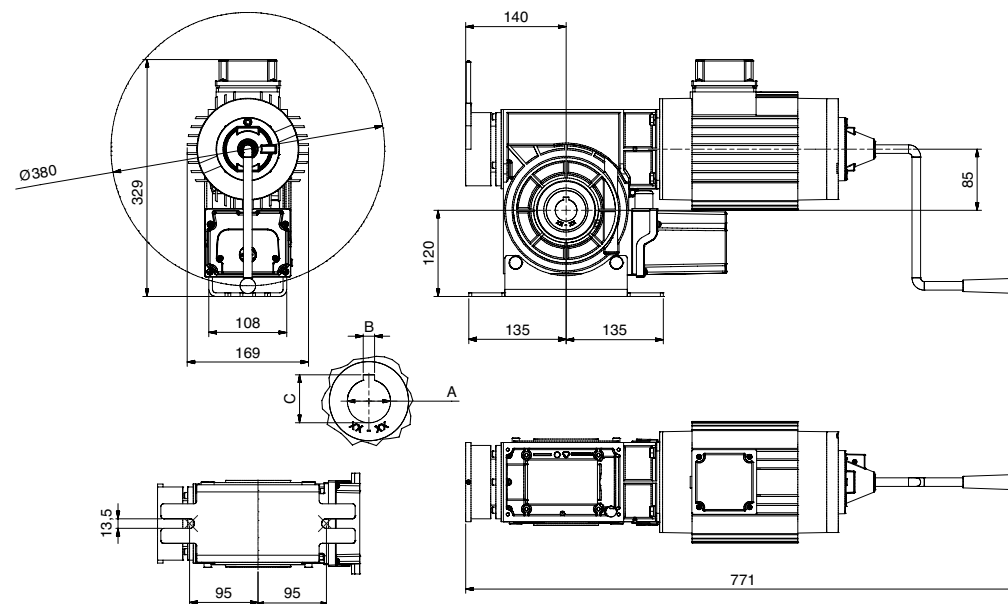
**MODEL:**

**HDFN 35-140 KU, HDFN 45-90 KU, HDFN 60-140 KU, HDFN 80-90 KU**



|                       | Ø A  | B    | C    |
|-----------------------|------|------|------|
| <b>HDFN 35-140 KU</b> | 25   | 8    | 28,3 |
| <b>HDFN 35-140 KU</b> | 25,4 | 6,35 | 28,4 |
| <b>HDFN 35-140 KU</b> | 30   | 8    | 33,3 |
| <b>HDFN 45-90 KU</b>  | 25   | 8    | 28,3 |
| <b>HDFN 45-90 KU</b>  | 25,4 | 6,35 | 28,4 |
| <b>HDFN 45-90 KU</b>  | 30   | 8    | 33,3 |
| <b>HDFN 60-140 KU</b> | 25   | 8    | 28,3 |
| <b>HDFN 60-140 KU</b> | 25,4 | 6,35 | 28,4 |
| <b>HDFN 60-140 KU</b> | 30   | 8    | 33,3 |
| <b>HDFN 80-90 KU</b>  | 25   | 8    | 28,3 |
| <b>HDFN 80-90 KU</b>  | 25,4 | 6,35 | 28,4 |
| <b>HDFN 80-90 KU</b>  | 30   | 8    | 33,3 |

**HDFN 160-95 KU**

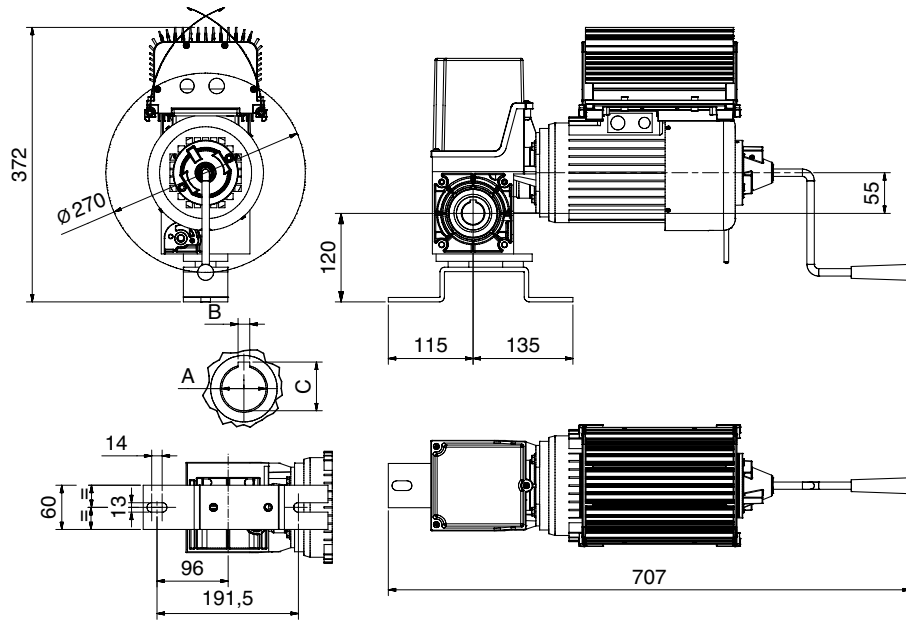


|                       | Ø A | B  | C    |
|-----------------------|-----|----|------|
| <b>HDFN 160-95 KU</b> | 40  | 12 | 43,3 |



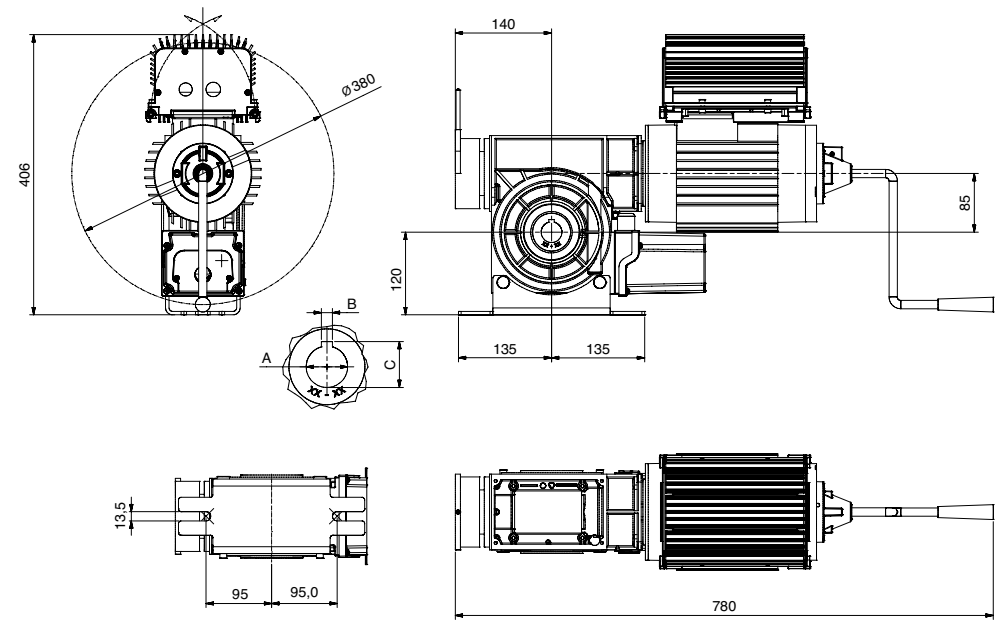
**MODEL:**

**HDFNI 35-140 KU, HDFNI 45-90, HDFNI 60-140 KU, HDFNI 80-90 KU**



|                        | Ø A  | B    | C    |
|------------------------|------|------|------|
| <b>HDFNI 35-140</b>    | 25   | 6    | 28,3 |
| <b>HDFNI 35-140</b>    | 25,4 | 6,35 | 28,4 |
| <b>HDFNI 35-140 KU</b> | 30   | 8    | 33,3 |
| <b>HDFNI 45-90</b>     | 25   | 6    | 28,3 |
| <b>HDFNI 45-90</b>     | 25,4 | 6,35 | 28,4 |
| <b>HDFNI 45-90 KU</b>  | 30   | 8    | 33,3 |
| <b>HDFNI 80-90 KU</b>  | 25   | 6    | 28,3 |
| <b>HDFNI 80-90 KU</b>  | 25,4 | 6,35 | 28,4 |
| <b>HDFNI 80-90 KU</b>  | 30   | 8    | 33,3 |
| <b>HDFNI 60-140 KU</b> | 25   | 6    | 28,3 |
| <b>HDFNI 60-140 KU</b> | 25,4 | 6,35 | 28,4 |
| <b>HDFNI 60-140 KU</b> | 30   | 8    | 33,3 |

**HDFNI 120-140 KU, HDFNI 160-95 KU, HDFNI 220-70 KU, HDFNI 300-45 KU**



|                         | Ø A | B  | C    |
|-------------------------|-----|----|------|
| <b>HDFNI 120-140 KU</b> | 30  | 8  | 33,3 |
| <b>HDFNI 120-140 KU</b> | 40  | 12 | 43,3 |
| <b>HDFNI 160-95 KU</b>  | 30  | 8  | 33,3 |
| <b>HDFNI 160-95 KU</b>  | 40  | 12 | 43,3 |
| <b>HDFNI 220-70 KU</b>  | 30  | 8  | 33,3 |
| <b>HDFNI 220-70 KU</b>  | 40  | 12 | 43,3 |
| <b>HDFNI 300-45 KU</b>  | 40  | 12 | 43,3 |

# Electrical Accessories

## For D-Pro Automatic control units



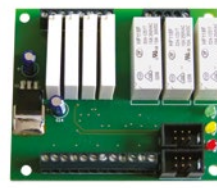
**NDA004**  
Bluetooth module for D-Pro Automatic control unit management via smartphone.



**NDA006**  
K60 module for D-Pro Automatic control unit, to communicate via CAN bus (combined with NDA008 module).



**NDA008**  
K65 module for D-Pro Automatic control unit, for remote control (combined with NDA0006 module).

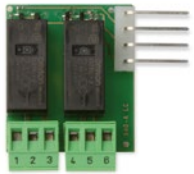


**NDA030**  
K30 expansion module for D-Pro Automatic to add further inputs, outputs and to control traffic lights.

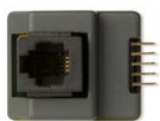


**NDA070**  
K70 expansion module for D-Pro Automatic for 2 channels loop detector.

## For D-Pro Action control units



**NDA040**  
For optional potential free outputs.



**IBT4N**  
Interface module for O-View programmer connection.



**IT4WIFI**  
Smart Wi-Fi interface to control via smartphone Nice automations compatible with the BusT4 (Opera) protocol.

## Other accessories



**720000001100**  
CEE threephase power supply plug, 1m long.



**CA8.5320**  
Schuko singlephase, 90°, 2 m long.



**730000001023**  
Main switch for control units.



**730000001030**  
Emergency switch, Normally Closed.



**920512000730**  
Wall mounted external push button, open-stop-close buttons, 7 m long cable.

## Security devices



**920132111001**  
Optosensors with Diagnosis function (10.5 m long cable).



**920081155516**  
Spiral cable 5 x 0,5 qmm, 0,8 m spiraled / 1,6 m stretched.



**920081155530**  
Spiral cable 5 x 0,5 qmm, 0,8 m spiraled / 3 m stretched.



**920081155550**  
Spiral cable 5 x 0,5 qmm, 0,8 m spiraled / 5m stretched.



**920821000010**  
Safety switch against possible cable breaks or slackering.



**920811000010**  
Slack Rope Cylindrical Switch Rope Brake against cable breaks.



**NDA010**  
Junction Box with integrated pneumatic switch for pneumatic safety edge.



**NDA011**  
Junction Box black, with board, plugable with hole Ø 16m.



**NDA012**  
Junction Box black, with board, plugable with hole Ø 16 m incl. SBA-Sensor for autom. Floor Level Regulation.



**NDA013**  
Junction Box black, with board, plugable without hole.



| Code              | Description                             |
|-------------------|---|
| <b>TCLS</b>       | Light Curtain 2.500 mm                  |
| <b>TCLS1</b>      | Light Curtain 2.030 mm                  |
| <b>TCLSC</b>      | Connecting Cable for Light Curtain 10 m |
| <b>TCLSC3</b>     | Connecting Cable for Light Curtain 3 m  |
| <b>TCLSFSS230</b> | FSS controler for Light Curtain 230 Vac |
| <b>TCLSFSS24</b>  | FSS controler for Light Curtain 24 Vdc  |

| Code                | Description   |
|---------------------|---|
| <b>920091100085</b> | Connecting Cable for 2 junction boxes, lenght 8.5 m |
| <b>920540100041</b> | Roller Lever Switch                                 |
| <b>920670000020</b> | Wicked Door Contact                                 |
| <b>920141000010</b> | Rubber Profile 1m                                   |
| <b>920320228100</b> | C-rail, Aluminium 28 mm x 10 mm, in 2 m-pcs.        |

# Electrical Accessories

## Photocells



**EPS**  
Pair of outdoor photocells slim.



**EPSA**  
Pair of outdoor photocells slim, burglar-resistant metal body.



**EPM**  
Pair of outdoor photocells.



**EPMO**  
Pair of outdoor photocells, 30° positionable.



**EPMA**  
Pair of outdoor photocells, burglar-resistant metal body.



**EPMAO**  
Pair of outdoor photocells, 30° positionable, burglar-resistant metal body.



**EPL**  
Pair of surface-mounted photocells large.



**EPLO**  
Pair of surface-mounted photocells large, 30° positionable.



**EPLIO**  
Pair of photocells large for recessed mounting, 30° positionable.



**EKA03**  
Bowl for recessed mounting (depth 66 mm) for installation of EKSI, EKSIEU. Also compatible with EPLIO, EPLIOB, EDSI, EDSIB.



**F210**  
Pair of optical devices for sensitive edges fastened on moving door, can be swivelled through 210° with relay output. Battery kit (fta1/fta2) compulsory.



**FA1**  
Vandal-proof metal shell.



**EPMOR**  
Surface-mounted reflective photocell + reflective mirror.



## Selectors, proximity reader and flashing light



**EDSWG**  
Radio digital selector compatible with the receivers of the flor series.



**EKSEU**  
Key selector Era series, european cylinder, for outdoor installation.



**EKSIEU**  
Key selector era series, european cylinder, for recessed mounting.



**EKS\***  
Key selector era series, for outdoor installation.



**EKSI**  
Key selector era series, for recessed mounting.



**ETP**  
Proximity reader for transponder cards MOCARD and MOCARDP to be combined with the MORX decoder.



**MORX**  
Decoder for 1 etp or up to 4 EDS/EDSI connected in parallel, with 1 BM1000 memory for 255 combinations.



**MOCARD**  
Transponder card programmable via OBOX.



**MOCARDP**  
Transponder card programmable via OBox, with sequential coding for multiple entry.



**HSB1**  
Transponder badge newly programmable via OBox, with sequential coding for multiple entry.



**ELAC**  
Signal LED flashing light, 90-240 Vac, for preset control units.

### \* EKS Codes

| Code           | Description  |
|----------------|--|
| <b>EKS1001</b> | Key selector Era series, for outdoor installation, Cod. 1001 |
| <b>EKS1002</b> | Key selector Era series, for outdoor installation, Cod. 1002 |
| <b>EKS1003</b> | Key selector Era series, for outdoor installation, Cod. 1003 |
| <b>EKS1004</b> | Key selector Era series, for outdoor installation, Cod. 1004 |
| <b>EKS1005</b> | Key selector Era series, for outdoor installation, Cod. 1005 |
| <b>EKS1006</b> | Key selector Era series, for outdoor installation, Cod. 1006 |
| <b>EKS1007</b> | Key selector Era series, for outdoor installation, Cod. 1007 |
| <b>EKS1008</b> | Key selector Era series, for outdoor installation, Cod. 1008 |
| <b>EKS1009</b> | Key selector Era series, for outdoor installation, Cod. 1009 |
| <b>EKS1010</b> | Key selector Era series, for outdoor installation, Cod. 1010 |

### Other accessories

| Code         | Description   |
|--------------|---|
| <b>CHS</b>   | Neutral key for EKS, EKSI   |
| <b>CHEU</b>  | Neutral key for EKSEU, EKSIEU   |
| <b>EKA02</b> | Finishing kit for EDSI, EDSIB, EKSI, EKSIEU installation  |
| <b>EKA03</b> | Bowl for recessed mounting (depth 66 mm) for installation of EKSI, EKSIEU. Also compatible with EPLIO, EPLIOB, EDSI, EDSIB. |

# Mechanical accessories

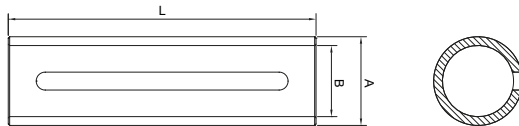
## Accessories for sectional doors



### ADAPTERS

| Code          | Description  | A     | B     | L   |
|---------------|--|-------|-------|-----|
| <b>NDA500</b> | Adapter from 31,75 to 25,4 mm shaft                      | 31,7  | 25,4  | 110 |
| <b>NDA501</b> | Adapter from 40 to 25,4 mm shaft                         | 40    | 25,4  | 120 |
| <b>NDA502</b> | Adapter from 40 to 30 mm shaft                           | 40    | 30    | 120 |
| <b>NDA503</b> | Adapter from 40 to 31,75 mm shaft                        | 40    | 31,75 | 120 |
| <b>NDA504</b> | Adapter from 55 to 40 mm shaft                           | 55    | 40    | 140 |
| <b>NDA505</b> | Adapter from 30 to 25,4 mm shaft                         | 30    | 25,4  | 120 |
| <b>NDA506</b> | Adapter from 30 to 25 mm shaft                           | 30    | 25    | 110 |
| <b>NDA507</b> | Adapter from 40 to 25 mm shaft                           | 40    | 25    | 120 |
| <b>CRA9</b>   | Adapter for diameter 31.75 (1,1/4"), 35 and 40 mm shafts | 31,75 | 35/40 | 195 |

\*Additional sizes on demand



### CHAIN RELEASE SYSTEM (spare parts)

| Code            | Description                                  |
|-----------------|--|
| <b>NDSP0009</b> | Emergency handchain system for SW-SD (5 mt)  |
| <b>NDSP0005</b> | Emergency handchain system for SW-SD (10 mt) |



### EXTRA CHAIN

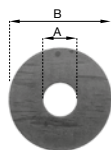
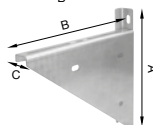
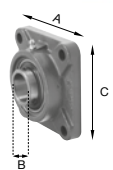
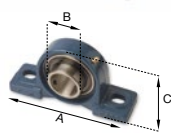
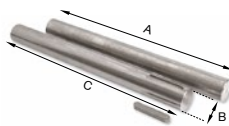
| Code                | Description                                    |
|---------------------|--|
| <b>900029000050</b> | Additional chain, 5 m length                   |
| <b>100031010000</b> | Additional chain, in rolls of 100 m, per meter |
| <b>100031010001</b> | Link for additional chain                      |



### HEATING DEVICES

| Code       | Description                               |
|------------|---|
| <b>PW1</b> | Heating element for the automation system |
| <b>TW1</b> | Regulation thermostat                     |

## Accessories for rolling shutters



### ADAPTERS

| Code          | Description   | A   | Ø B | C   |
|---------------|---|-----|-----|-----|
| <b>NDA540</b> | Kit with shafts Ø 30 mm (motor side with key + opposite side) | 395 | 30  | 495 |
| <b>NDA541</b> | Kit with shafts Ø 40 mm (motor side with key + opposite side) | 395 | 40  | 495 |
| <b>NDA542</b> | Kit with shafts Ø 55 mm (motor side with key + opposite side) | 495 | 55  | 495 |

### SHAFT BEARING (both for Rolling shutters and High Speed doors)

| Code                | Description                         | A   | Ø B | C   |
|---------------------|-------------------------------------|-----|-----|-----|
| <b>910510000300</b> | Shaft bearing Ø 30 mm               | 165 | 30  | 84  |
| <b>910510000400</b> | Shaft bearing Ø 40 mm               | 184 | 40  | 100 |
| <b>910510000550</b> | Shaft bearing Ø 55 mm               | 206 | 55  | 114 |
| <b>910410000300</b> | Shaft bearing, wall mounted Ø 30 mm | 108 | 30  | 108 |
| <b>910410000400</b> | Shaft bearing, wall mounted Ø 40 mm | 130 | 40  | 130 |

### TRIANGULAR BRACKET

| Code                | Description   | A   | B   | C   |
|---------------------|---|-----|-----|-----|
| <b>910310003000</b> | Triangular bracket for horizontal mounting, up to 300 kg  | 445 | 460 | 63  |
| <b>910310005300</b> | Triangular bracket for horizontal mounting, up to 530 kg  | 520 | 550 | 70  |
| <b>910310013000</b> | Triangular bracket for horizontal mounting, up to 1300 kg | 445 | 462 | 63  |
| <b>910310025000</b> | Triangular bracket for horizontal mounting, up to 2500 kg | 714 | 650 | 154 |

### CHAIN RELEASE SYSTEM (spare parts)

| Code            | Description   | A   | B   | C   |
|-----------------|---|-----|-----|-----|
| <b>NDSP0004</b> | Emergency handchain system for RDF140 (5 mt)                    | 445 | 460 | 63  |
| <b>NDSP0006</b> | Emergency handchain system for RDF-220/350 (5 mt)               | 520 | 550 | 70  |
| <b>NDSP0002</b> | Emergency handchain system for RDF-380/750-9,5 (5 mt)           | 445 | 462 | 63  |
| <b>NDSP0007</b> | Emergency handchain system for RDF750-24/850Nm and above (5 mt) | 714 | 650 | 154 |

### DISK FOR SHAFT

| Code             | Description  | Ø A | Ø B   |
|------------------|--|-----|-------|
| <b>141103201</b> | Disk for Shaft Ø 30, to suit tube Ø 133 x 4 mm     | 30  | 133   |
| <b>131176101</b> | Disk for Shaft Ø 30, to suit tube Ø 133 x 2 mm     | 30  | 133   |
| <b>131176201</b> | Disk for Shaft Ø 30, to suit tube Ø 159 x 4,5 mm   | 30  | 159   |
| <b>141105401</b> | Disk for Shaft Ø 30, to suit tube Ø 168,3 x 4,5 mm | 30  | 168,3 |
| <b>141109501</b> | Disk for Shaft Ø 30, to suit tube Ø 193,7 x 5,4 mm | 30  | 193,7 |
| <b>131046101</b> | Disk for Shaft Ø 40, to suit tube Ø 133 x 4 mm     | 40  | 133   |
| <b>131025701</b> | Disk for Shaft Ø 40, to suit tube Ø 159 x 4,5 mm   | 40  | 159   |
| <b>131026201</b> | Disk for Shaft Ø 40, to suit tube Ø 168,3 x 4,5 mm | 40  | 168,3 |
| <b>141026201</b> | Disk for Shaft Ø 40, to suit tube Ø 193,7 x 5,4 mm | 40  | 193,7 |
| <b>141106101</b> | Disk for Shaft Ø 40, to suit tube Ø 219,1 x 5,9 mm | 40  | 219,1 |
| <b>141106201</b> | Disk for Shaft Ø 40, to suit tube Ø 244,5 x 6,3 mm | 40  | 244,5 |

## Accessories for chain-driven rolling shutters



### CHAIN REDUCTION KIT

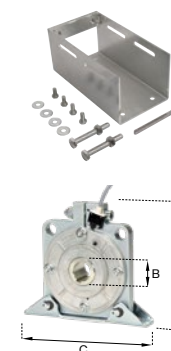
| Code          | Description   | Drive tooth wheel | Shaft tooth wheel | Chain length | Reduction rate | Shaft compatibility |
|---------------|---|-------------------|-------------------|--------------|----------------|---------------------|
| <b>NDA520</b> | Chain Reduction Kit 3/4", 2:1, Shaft Ø30mm, Pignion 12 + 24 Tooth, 2m Roller Chain      | 12 teeth          | 24 teeth          | 2 m          | 2:1            | Ø30mm               |
| <b>NDA521</b> | Chain Reduction Kit 1", 2:1, Shaft Ø40mm, Pignion 12 + 24 Tooth, 2m Roller Chain        | 12 teeth          | 24 teeth          | 2 m          | 2:1            | Ø40mm               |
| <b>NDA522</b> | Chain Reduction Kit 1"1/4, 2:1, Shaft Ø55mm, Pignion 12 + 24 Tooth, 2m Roller Chain     | 12 teeth          | 24 teeth          | 2 m          | 2:1            | Ø55mm               |
| <b>NDA523</b> | Chain Reduction Kit 3/4", 3:1, Shaft Ø30mm, Pignion 12 + 36 Tooth, 2.5m Roller Chain    | 12 teeth          | 36 teeth          | 2,5 m        | 3:1            | Ø30mm               |
| <b>NDA524</b> | Chain Reduction Kit 1", 3:1, Shaft Ø40mm, Pignion 12 + 36 Tooth, 2.5m Roller Chain      | 12 teeth          | 36 teeth          | 2,5 m        | 3:1            | Ø40mm               |
| <b>NDA525</b> | Chain Reduction Kit 1"1/4, 3:1, Shaft Ø55mm, Pignion 12 + 36 Tooth, 2.5m Roller Chain   | 12 teeth          | 36 teeth          | 2,5 m        | 3:1            | Ø55mm               |
| <b>NDA527</b> | Chain Reduction Kit 1:1 for SD, Shaft Ø25,4mm, Pignion 17 + 17 Tooth, 1,5m Roller Chain | 17 teeth          | 17 teeth          | 1,5 m        | 1:1            | Ø25,4mm             |

### FOOT BRACKET

| Code                | Description   |
|---------------------|---|
| <b>900210012000</b> | Small motors foot bracket for chain reduction system (up to RDF140)         |
| <b>900210035000</b> | Medium motors foot bracket for chain reduction system (up to RDF 750)       |
| <b>900210069000</b> | Big motors foot bracket for chain reduction system (from RDF850 to RDF1400) |

### SAFETY BEARING

| Code                | Description   | A   | Ø B | C   |
|---------------------|---|-----|-----|-----|
| <b>511121020300</b> | Safety Bearing TA 1/2 RD Ø 30mm Max Torque 332 Nm     | 185 | 30  | 210 |
| <b>511122020400</b> | Safety Bearing TA 2/3 RD Ø 40mm Max. Torque 552 Nm    | 225 | 40  | 260 |
| <b>511123020400</b> | Safety Bearing TA 3 RD Ø 40mm Max. Torque 599 Nm      | 255 | 40  | 280 |
| <b>511123020500</b> | Safety Bearing TA 3 RD Ø 50mm Max. Torque 599 Nm      | 255 | 50  | 280 |
| <b>511124020500</b> | Safety Bearing TA 4 RD Ø 50mm Max. Torque 1063 Nm     | 320 | 50  | 340 |
| <b>511125020600</b> | Safety Bearing TA 5 RD Ø 60mm con Max. Torque 1943 Nm | 380 | 60  | 390 |
| <b>511125020650</b> | Safety Bearing TA 5 RD Ø 65mm con Max. Torque 1943 Nm | 380 | 65  | 390 |
| <b>511126020800</b> | Safety Bearing TA 6 RD Ø 80mm con Max. Torque 3484 Nm | 470 | 80  | 470 |







# Era One LR & OXI LR

Bidirectional transmitters and receivers with LoRa® long range technology

Command reception feedback

- gate/door open
- gate/door closed
- partial opening/closing



NFC to display additional information on the remote control

Automation status querying

## 4 key transmitter: 3 radio channels and 1 key to request automation status.

433.92 MHz radio frequency with rolling code encoding, identity code management and self-learning.

**Long range commands:** LoRa® technology sends commands over a distance about 10 times greater than previous radio protocols. Automation control has never been so efficient!

**Even at a distance from the system,** you can enable a new transmitter by using another Era One LR transmitter already enabled in the receiver, thanks to exchange of the **identity code** between them.

**Elegant and convenient:** the Era One LR transmitter can be used as a stylish, high-tech keyring or fixed to the wall or your car's dashboard with the handy support (**ONECLIPKIT**).

**Era One LR bidirectional, ideal for use in cities or places where many devices are present.** The bidirectional radio protocol uses LoRa® modulation to improve immunity from interference.

## Radio receiver with connector, bidirectional, with LoRa® technology.

The OXILR is compatible with all Nice control units with SM connector and so can also make existing Nice automations long range and bidirectional.

**Ergonomic design:** antenna connectors, programming LED and key in convenient, handy positions.

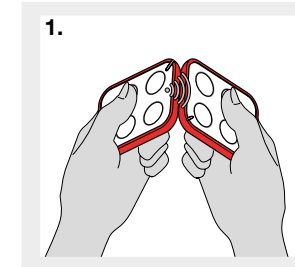
**Maximum flexibility:** they can memorise up to 1,024 bidirectional transmitters with LoRa® technology.

## TECHNICAL SPECIFICATIONS

| Code              | Description  | Pc/Pack |
|-------------------|--|---------|
| <b>ON3ELR</b>     | 3 channels, 433.92 MHz, bidirectional, with LoRa® technology             | 10      |
| <b>ONECLIPKIT</b> | White plastic clip support with adhesive for wall mounting               | 10      |
| <b>ONELRKIT</b>   | KIT with LoRa® technology<br>Contains: 2 x ON3ELR, 1 x OXILR, 1 x OX2UBP | 1       |

|               | Carrier frequency | Estimated range                    | Encoding | Power supply                       | Battery life                            | Ingress protection class             | Dimensions Weight     |
|---------------|-------------------|------------------------------------|----------|------------------------------------|---|--------------------------------------|-----------------------|
| <b>ON3ELR</b> | 433.92 MHz        | 1 Km; 100 m (if inside buildings)* | LR       | 3 Vdc; lithium battery type CR2032 | 2 years (with 10 transmissions per day) | IP40 (use in protected environments) | 45x56x11 h mm<br>18 g |

\* Transmitter range and receiver reception capacity may be affected by any devices operating on the same frequency in the area and by the position of the system's radio antenna.



**ONELRKIT** Kit with LoRa® technology for installation in third party automations, thanks to the OX2UBP hardware interface.

1. Code exchange between a memorized transmitter and a new one, to be memorized.

2. The NFC technology and a dedicated web page enable further information to be provided on the transmitter and battery status.



## RECEIVER TECHNICAL SPECIFICATIONS

| Code         | Description   | Pc/Pack |
|--------------|---|---------|
| <b>OXILR</b> | Radio receiver with connector, 433.92 MHz, bidirectional, with LoRa® technology | 1       |

|              | Reception frequency | Transmission frequency | Input impedance | Sensitivity | Encoding | Number of channels            | Power supply | Absorption  | Ingress protection class | Dimensions Weight         |
|--------------|---------------------|------------------------|-----------------|-------------|----------|-------------------------------|--------------|-------------|--------------------------|---------------------------|
| <b>OXILR</b> | 433.92 MHz          | 433.92 MHz             | 50 Ohm          | -118 dBm    | LR       | 4 (on "SM" plug-in connector) | 5 Vdc        | 50 mA (max) | IP 30                    | 49.5x18x41.9 h mm<br>22 g |

# Era One

## Transmitters and receivers



### 1, 2, 4, 9 channel transmitters and prewired receivers with connector, with and without built-in transmitter.

433.92 MHz rolling code, with management of Identity Codes and Certificates, self-learning and built-in proximity receiver; with 72 bit O-Code encoding, also compatible with receivers with Nice FloR encoding.

Available in versions with multiple input sequential encoding (Era OneC).

**Advanced:** uses data processing and recognition systems that increase its degree of security and deliver a threefold reduction in automation response times.

**Easy memorisation, even at a distance:** thanks to Opera receivers.

**Safe:** if a transmitter is stolen or lost, with the O-Box the user can **replace it**, maintaining the same functions as in the previous one, **disable** the old transmitter by increasing the priority level on the new Era One.

There are two options for enabling a new Inti transmitter, **even at a distance from the system:**

- using a transmitter already programmed in the receiver, thanks to the enabling **Code exchange** between the two;
- using the Nice O-Box connection interface; the receiver's **Certificate** is entered by just placing the new Inti next to the O-Box and following the guided procedure on a PC or PDA.

**Extremely practical:** using the O-Box software, the Era OneC version allows whole packs of 10 devices to be programmed in a single procedure, without even opening them!

**Elegant and convenient:** the Era One transmitter can be used as a stylish, high-tech keyring or fixed to the wall or your car's dashboard with the handy support (**ONECLIPKIT**).

**Era OneFM, ideal for use in cities or places where many devices are present.**

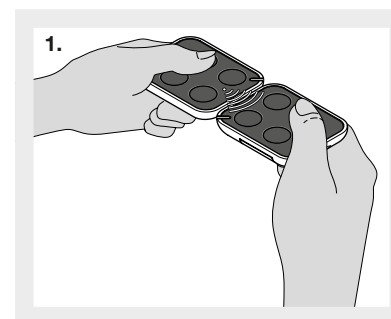
868.46 MHz Rolling Code transmitter line, using frequency modulation (FM), less sensitive to interference than amplitude modulation AM.

### TRANSMITTER TECHNICAL SPECIFICATIONS

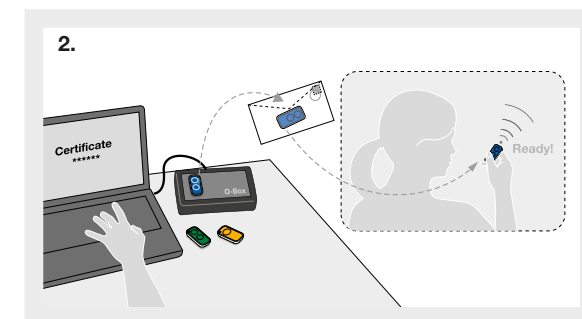
| Code              | Description   | Pc/Pack |
|-------------------|---|---------|
| <b>ON1E</b>       | 1 channel, 433.92 MHz   | 10      |
| <b>ON2E</b>       | 2 channels, 433.92 MHz  | 10      |
| <b>ON4E</b>       | 4 channels, 433.92 MHz  | 10      |
| <b>ON9E</b>       | 9 channels, 433.92 MHz  | 10      |
| <b>ON1CE</b>      | 1 channel, 433.92 MHz, with multiple input sequential encoding  | 10      |
| <b>ON2CE</b>      | 2 channels, 433.92 MHz, with multiple input sequential encoding | 10      |
| <b>ON4CE</b>      | 4 channels, 433.92 MHz, with multiple input sequential encoding | 10      |
| <b>ON1EFM</b>     | 1 channel, 868.46 MHz   | 10      |
| <b>ON2EFM</b>     | 2 channels, 868.46 MHz  | 10      |
| <b>ON4EFM</b>     | 4 channels, 868.46 MHz  | 10      |
| <b>ON9EFM</b>     | 9 channels, 868.46 MHz  | 10      |
| <b>ONECLIPKIT</b> | White plastic clip support with adhesive for wall mounting      | 10      |

|                    | Carrier frequency | Estimated range                                 | Encoding                    | Power supply                       | Battery life                            | Ingress protection class             | Dimensions Weight   |
|--------------------|-------------------|---|-----------------------------|------------------------------------|---|--------------------------------------|---------------------|
| <b>ON_E, ON_CE</b> | 433.92 MHz        | 200 m (outdoor);<br>35 m (if inside buildings)* | O-Code 72 bit; rolling code | 3 Vdc; type CR2032 lithium battery | 2 years (with 10 transmissions per day) | IP40 (use in protected environments) | 45x56x11 mm<br>18 g |
| <b>ON_EFM</b>      | 868.46 MHz        |   |                             |                                    |   |                                      |                     |

\* Transmitter range and receiver reception capacity may be affected by any devices operating on the same frequency in the area.



Code exchange between a memorized transmitter and a new one, to be memorized.



Possible memorisation using Nice O-Box and the "Certificate".

# Era Flor

## Transmitters and receivers



### 1, 2, 4 channel transmitters with a new stylish design.

433.92 MHz rolling code system with self-learning function.

Also available in versions with multiple input sequential encoding (Era FlorCE).

**Absolute security:** rolling code transmission makes the transmitter impossible to clone.

**Ideal solution for the management of multi-user apartment block systems** thanks to the unique, personal code.

**Easy duplication of new transmitter close to the system** by using an authorised transmitter or directly using a key on the receiver, while a LED displays the various functions.

**Extremely practical:** using the O-Box programming unit, the Era Flor-CE version allows whole packs of 100 devices to be programmed in a single procedure, without even opening them.

The **O-Box** and dedicated software applications for PC and PDA allow:

- **quick, user-friendly programming** of receivers and transmitters;
- **management** and printout **of code list**;
- creation of individual **installation databases** (useful in multi-user systems).

**Optimal autonomy and low consumption.**

**Elegant and convenient:** the Era FloR transmitter can be used as a stylish, high-tech keyring or fixed to the wall or your car's dashboard with the handy support (**FLORCLIPKIT**).

**Total compatibility:** with previous Flor series receivers (universal, universal modular and with Nice or SM connector) and with the One receivers (OXI/OXIT, OX2/OX2T and OX4T).

### TRANSMITTER TECHNICAL SPECIFICATIONS

| Code               | Description  | Pc/Pack |
|--------------------|--|---------|
| <b>FLO1RE</b>      | 1 channel Era FloR transmitter   | 10      |
| <b>FLO2RE</b>      | 2 channel Era FloR transmitter   | 10      |
| <b>FLO4RE</b>      | 4 channel Era FloR transmitter   | 10      |
| <b>FLO1RCE</b>     | 1 channel Era FloR transmitter with multiple input sequential encoding | 10      |
| <b>FLO2RCE</b>     | 2 channel Era FloR transmitter with multiple input sequential encoding | 10      |
| <b>FLO4RCE</b>     | 4 channel Era FloR transmitter with multiple input sequential encoding | 10      |
| <b>FLORCLIPKIT</b> | Black plastic clip support with adhesive for wall mounting             | 10      |

| Carrier frequency | Estimated range                            | Encoding  | Power supply                       | Battery life                            | Ingress protection class             | Dimensions Weight     |
|-------------------|--|---|------------------------------------|---|--------------------------------------|-----------------------|
| 433.92 MHz        | 150/200 with tuned antenna in open spaces* | 52 bit digital (4.5 million billion combinations) | 3 Vdc; lithium battery type CR2032 | 3 years (with 10 transmissions per day) | IP40 (use in protected environments) | 45x56x11 h mm<br>18 g |

\* Transmitter range and receiver reception capacity may be affected by any devices operating on the same frequency in the area.



FLO1RE



FLO2RE



FLO4RE

# O-View

## Multipurpose control unit



OVBT



OVBTGSM

O-VIEW  
SOFTWARE SUITE

Unit for control, programming and diagnostics for devices equipped with BUS T4 connection, on site or remotely via GPRS thanks to the connection with your PDA, Smartphone or PC.

**Advanced management:** O-View connects to the compatible control unit by IBT4N interface and BUS T4 cable (supplied), providing access to all control unit parameters to adapt the system to every need.

By connecting O-View permanently to a control unit or group of control units via BUS T4, a network can be created for local or remote centralised management.

**Programmable:** thanks to the built-in clock, it is also possible (with integrated backup battery) to program delivery of commands at a set time, for example to automate opening and closing of complex industrial and commercial systems or for the creation of "scenarios".

A practical wall-mounted support supplied.

**Simple programming mode:** with intuitive menus valid for each product, with no need to consult the specific instructions.

O-View powers up and automatically recognises all devices on the network as soon as it is connected, displaying only the specific parameters of the device on which to intervene.

In the case of several devices on the network the BUS T4 address is identifiable by means of a text label personalised as required, enabling rapid recognition of the associated device.

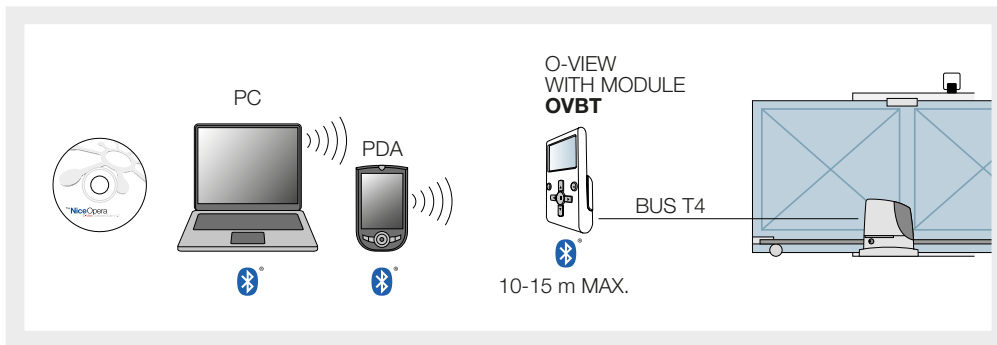
**Safe:** two password-protected levels (for the user and the installer).

**Practical:** O-View is your portable office, and can be connected just when programming or for maintenance, or can be installed permanently on site to exploit all the benefits of local or remote centralised management.

## TECHNICAL SPECIFICATIONS

| Code           | Description   | Pc/Pack |
|----------------|---|---------|
| <b>OVIEW</b>   | Unit for control, programming and diagnostics of devices equipped with BUS T4 connection      | 1       |
| <b>OVBT</b>    | Bluetooth module for O-View and "O-View Software Suite" application for PC, PDA or Smartphone | 1       |
| <b>OVBTGSM</b> | GSM module for O-View and "O-View Software Suite" application for PC, PDA or Smartphone       | 1       |

|                                     |  |
|-------------------------------------|--|
| Graphic interface                   | LCD display 128x64 dots (46x29 mm); 2.2"             |
| Operator input device               | Joypad with 5 + 2 keys                               |
| Display/key lighting                | White light  |
| Time and date display               | With backup battery (min. lifetime 10 years)         |
| Maximum number of commands per hour | 64   |
| Event log                           | Storage capacity 400 events                          |
| Connection cable length (m)         | 2 (cable supplied); 700 (other cable)                |
| Power supply                        | Supplied by devices on BUS T4 network                |
| Absorbed current (mA)               | Max. 20 (without accessories)                        |
| Insulation                          | Class III  |
| Housing protection rating (IP)      | 20   |
| Working temp. (°C Min/Max)          | From -20° to +55°                                    |
| Dimensions (mm)                     | 107x61x20 h (with wall-mounted support: 125x70x32 h) |
| Weight (g)                          | 75 (without cable)                                   |



## OVBT

### Bluetooth connection module for O-View interface.

“O-View Software Suite” enables connection via PC or PDA to O-View in the vicinity of the system, to intervene on the control units on the BUS T4 network.

Maximum connection distance 15 m.

### O-VIEW SOFTWARE SUITE

This application, supplied with OVBT and OVBTGSM, as well as expanding the functions of O-View enables the creation of a database of installations with personal data of clients and configurations of each system, even on more complex versions.

**By connecting to the site [www.niceforyou.com](http://www.niceforyou.com) users can download the constantly updated firmware and software versions.**

The interface of “O-View Software Suite” has been specially designed to enable rapid access to all parameters of the connected devices without the need for physical access, as well as quick diagnostics of malfunctions by consulting the event log, all the most practical and intuitive way possible.

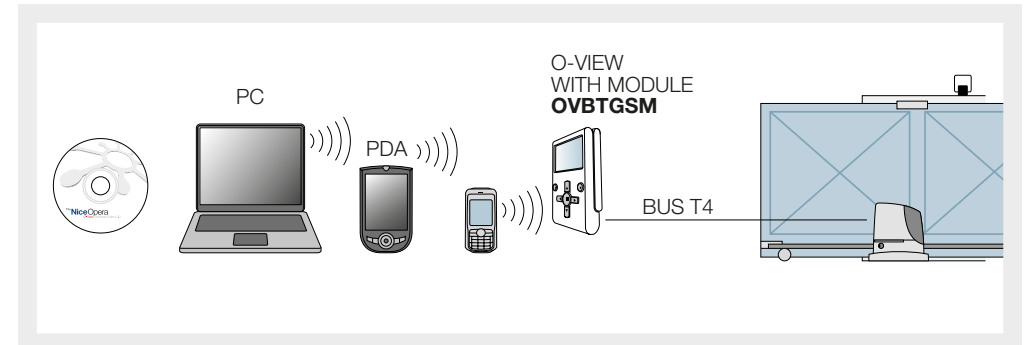
The O-View control function has been expanded: in just one PC screen, all applications connected via BUS T4 can be controlled.

## Minimum requirements

### O-View Desktop version for PC:

- Processor: type AMD®/Intel® (500 MHz) - Recommended by Nice: type AMD®/Intel® (1 GHz)
- RAM: 128 MB - Recommended by Nice: 256 MB
- Free space on disk: 280 MB - Recommended by Nice: 512 MB
- Operating system: Operating system: Windows® 98 SE or later - Recommended by Nice: Windows® 2000 or later up to Win 7
- Connection: Bluetooth®
- Graphics resolution: 800 x 600, 256 colours
- Disk drive: CD-Rom (required for installation).

NOTE Software installation includes installation of the Microsoft®.NET Framework Redistributable 2.0 programme.



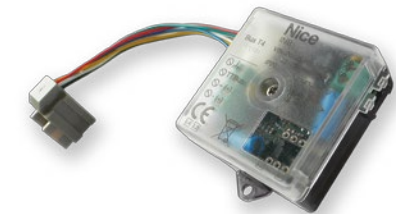
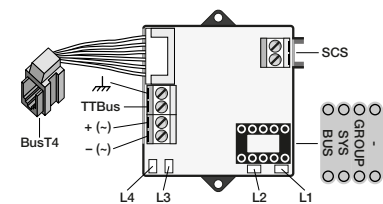
## OVBTGSM

In addition to the benefits of the OVBT module, the automation or network of automations can now be **controlled via GSM** by connecting O-View to the system via BUS T4.

A GPRS connection also enables connection via the Internet to O-View to obtain all management functions offered by the software from any location with no need for presence on site.

The user can remotely control the automation via GSM, from any of the enabled numbers, and check status, such as opening a gate by means of a phone call or by sending 4 different controls via SMS text message, with the security offered by entry of a unique password.

**INB, the Nice control interface** that enables communication between the systems Nice Bus (TTBus and BusT4) and MyHome of Bticino (SCS).



## TECHNICAL SPECIFICATIONS

| Code       | Description  | Pc/Pack               |
|------------|--|-----------------------|
| <b>INB</b> | Communication interface between Bticino Bus (SCS) and Nice Bus (TTBus and BusT4) | 1                     |
|            | Power supply   | Consumption           |
| <b>INB</b> | to BusT4, or 24 Vac/<br>dc (limits 20 ÷ 35<br>Vdc, 22 ÷ 35 Vac)                  | approx. 18 mA         |
|            | Insulation   | Protection level (IP) |
|            | class III  | 20                    |
|            | Working temp. (°C<br>Min. Max)   | Dimensions (mm)       |
|            | -20÷50 °C  | 41x52x18h             |



# Receivers

Era Inti, One, Flor, NiceWay

## The complete line of receivers with Opera system functions, suitable for all installation requirements:

- **with connector**, compatible with Nice control units with SM type connector and third-party control units thanks to the OX2UBP hardware interface.
- **universal prewired**, for use with all types of control unit, for the control of any automation, lighting or irrigation system or other electric circuits.

**Maximum flexibility:** up to 1024 transmitters can be memorised.

**Convenient and practical:** the inclusion of a transmitter in the OXITFM, OX2T/OX2TFM and OX4T receivers allows radio codes to be accessed by means of the O-Box multifunction interface even when in inaccessible positions.

OXITFM, OX2T/OX2TFM and OX4T receivers can be used as signal repeaters to increase the operating distance between transmitters and other One series receivers.

**Secure use**, thanks to the 3 password-protected levels.

**The O-Box** and dedicated software applications for PC and PDA allow:

- **quick, user-friendly programming** of receivers and transmitters;
- **management and printout of code list;**
- creation of individual **installation databases** (useful in multi-user systems).

**Management of multi-user system:** through the unique, personal code: the recognition receivers can receive and memorise up to 255 codes.

**Memorisation:** a particular receiver output can be associated to each transmitter key (e.g. key 3 TX= output 1 RX).

## 433.92 MHz RECEIVERS, WITH OPERA SYSTEM FUNCTIONS

| Code                      | Description   | Pc/Pack |
|---------------------------|---|---------|
| <b>WITH CONNECTOR</b>     |   |         |
| <b>OXIBD</b>              | Radio receiver with connector, bidirectional, 433.92 MHz      | 1       |
| <b>UNIVERSAL PREWIRED</b> |   |         |
| <b>OX2</b>                | 2 channels, without built-in transmitter                      | 1       |
| <b>OX2T</b>               | 2 channels, with built-in transmitter                         | 1       |
| <b>OX4T</b>               | 4 channels, with built-in transmitter                         | 1       |
| <b>HARDWARE INTERFACE</b> |   |         |
| <b>OX2UBP</b>             | Universal hardware interface for OXI series plug-in receivers | 1       |



OXI



OX2, OX2T



OX4T

## 868.46 MHz RECEIVERS, WITH OPERA SYSTEM FUNCTIONS

| Code                      | Description                              | Pc/Pack |
|---------------------------|--|---------|
| <b>WITH CONNECTOR</b>     |  |         |
| <b>OXIFM</b>              | 4 channels, without built-in transmitter | 1       |
| <b>OXITFM</b>             | 4 channels, with built-in transmitter    | 1       |
| <b>UNIVERSAL PREWIRED</b> |  |         |
| <b>OX2FM</b>              | 2 channels, without built-in transmitter | 1       |
| <b>OX2TFM</b>             | 2 channels, with built-in transmitter    | 1       |



OXIFM, OXITFM



OX2FM, OX2TFM

## PROFESSIONAL, TUNED DIRECTIONAL AERIAL

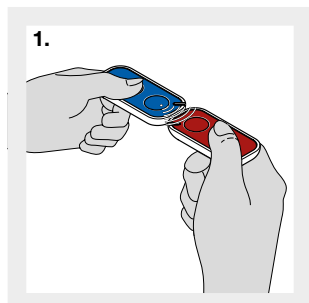
|            |                 |   |
|------------|-----------------|---|
| <b>ABF</b> | Bracket mounted | 1 |
|------------|-----------------|---|

## MULTI-FUNCTION INTERFACE

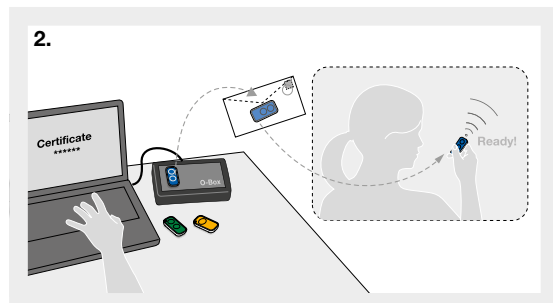
| Code          | Description   | Pc/Pack |
|---------------|---|---------|
| <b>OBOX2</b>  | Dual Band Interface, for 433.92/868.46 MHz devices, complete with software, supplied with USB connection cable                      | 1       |
| <b>OBOX2B</b> | Dual Band Interface, for 433.92/868.46 MHz devices, complete with software, with USB connection cable and built-in Bluetooth module | 1       |



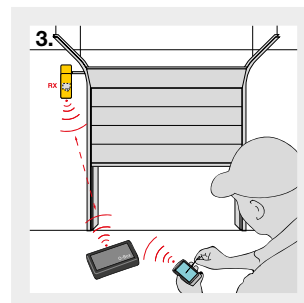
**O-BOX**



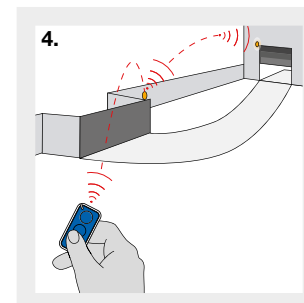
Code exchange between a memorized transmitter and a new one, to be memorized.



Possible memorisation using Nice O-Box and the "Certificate".



The presence of a "transmitter" in the OXIT, OX2T and OX4T receivers allows radio codes to be accessed by means of the O-Box multifunction interface.



OXIT, OX2T and OX4T receivers can be used as signal repeaters.

## RECEIVER WITH OPERA SYSTEM - TECHNICAL SPECIFICATIONS

| Code          | Reception frequency (MHz) | Transmission frequency (MHz) | Input impedance (Ohm)                         | Sensitivity                    | Encoding                                       | Number of channels            | Relay contact          | Power supply                    | Absorption                    | Ingress protection class | Dimensions (mm)     | Weight (g) |
|---------------|---------------------------|------------------------------|---|--------------------------------|--|-------------------------------|------------------------|---------------------------------|-------------------------------|--------------------------|---------------------|------------|
| <b>OXIBD</b>  | 433,92                    | 433.92 MHz (BD only)         | 50  | -108 dBm                       | BD, O-Code, FloR, TTS, Flo, Smilo              | 4 (on "SM" plug-in connector) | -                      | 5 Vdc                           | 50 mA (max)                   | IP 30                    | 49.5x18x41.9 h      | 22         |
| <b>OX2</b>    |                           | -                            |   |                                |  | 2                             |                        |                                 |                               |                          | max 0.5 A 50 V (NA) |            |
| <b>OX2T</b>   |                           | 433,92                       | >0.5 μ V for successful signal                | O-Code, FloR, Flo              | 4 relays with NO and NC contacts, voltage-free | 5 A - 250 V                   | 110 ÷ 240 Vac 50/60 Hz | 80 mA                           | IP 44 (with container intact) | 128x112x43 h             | 260                 |            |
| <b>OX4T</b>   |                           |                              |   |                                | 4 (15 on BUS T4)                               | -                             | 5 Vdc                  | 30 mA (max)                     | 50x19x45 h                    | 20                       |                     |            |
| <b>OXIFM</b>  | 868,46                    | -                            | 50  | >0.5 μ V for successful signal | O-Code, FloR, Flo                              | 4 (15 on BUS T4)              | -                      | 5 Vdc                           | 30 mA (max)                   | IP 30                    | 50x19x45 h          | 20         |
| <b>OXITFM</b> |                           | 868,46                       |   |                                |  |                               |                        |                                 |                               |                          | 2                   |            |
| <b>OX2FM</b>  |                           | -                            | >0.8 μ V for signals with successful outcomes | O-Code                         | 2  | max 0.5 A 50 V (NA)           | from 12 to 28 Vdc/Vac  | 100 mA (max) with relays active | IP 30                         | 58x86x22 h               | 55                  |            |
| <b>OX2TFM</b> |                           | 868,46                       |   |                                |  |                               |                        |                                 |                               |                          |                     |            |

## ACCESSORIES - TECHNICAL SPECIFICATIONS

| Code       | Reception frequency (MHz) | Impedance (Ohm) | Bracket         | Cablec |
|------------|---------------------------|-----------------|-----------------|--------|
| <b>ABF</b> | 433,92                    | 50              | stainless steel | RG 58  |



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