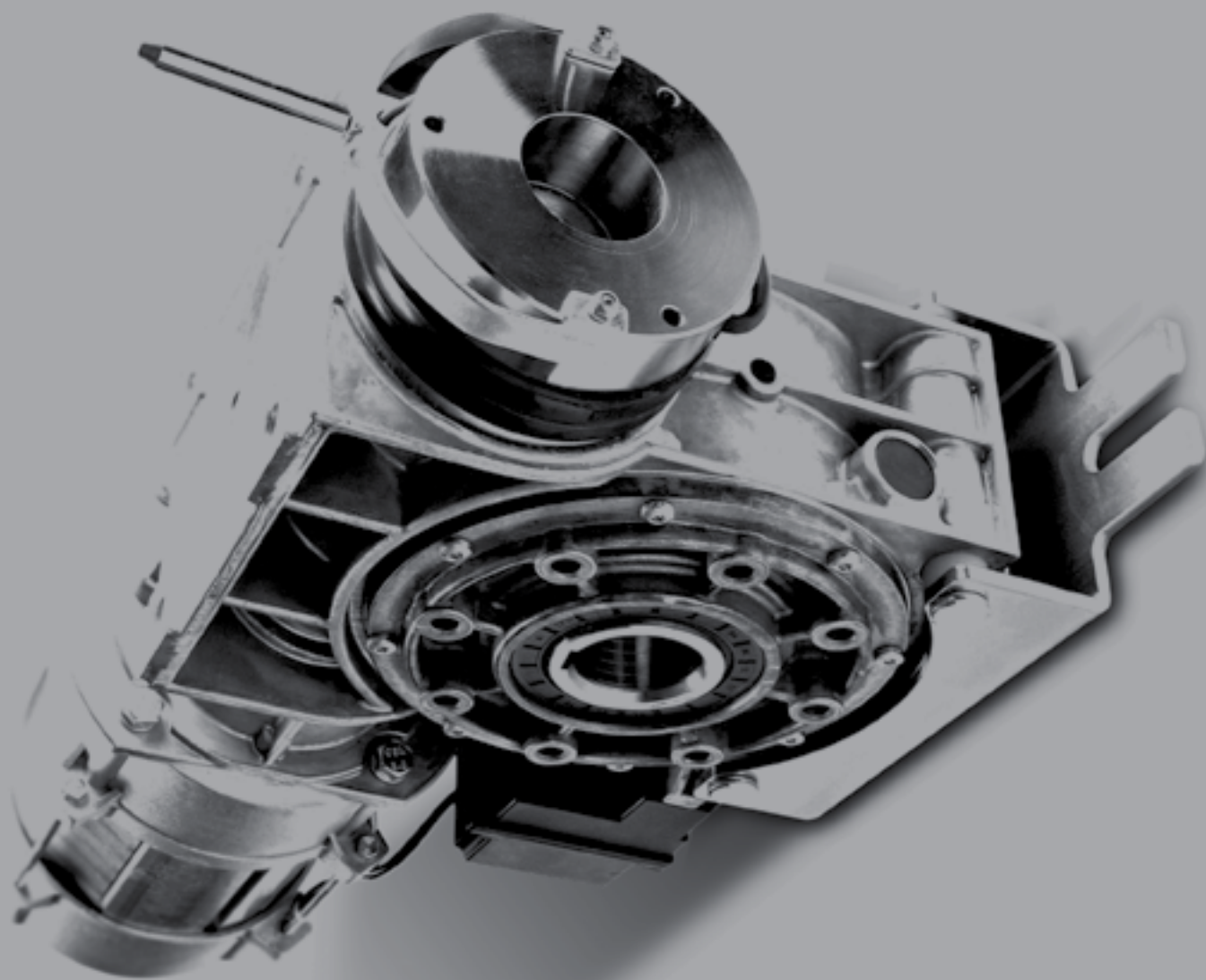


NiceIndustrialDoors

Automation systems for industrial applications:
sectional and rolling doors, high speed doors
and dock levellers

Catalogue

2012



Nice

Home Automation

4 11	The Nice World
12 13	Nice for industrial applications
16 24	Applications for sectional balanced doors
24 33	Applications for high speed doors
34 51	Applications for rolling shutters
52 67	Applications for shutters with chain transmission
68 73	Control units
74 76	Accessories and cables
78 81	Control electronics and accessories

Nice Total Control

Home integrated solutions.

**Ease of use,
aesthetic quality,
safety.**

Nice is easy to offer because it's easy to install and use, thanks to a range of products which links innovation to design:

- 1. technology for the installer**
- 2. comfort for the user**
- 3. simplicity for everyone.**

With Nice, gates, garage doors, blinds and shutters are always under control, as well as lighting and alarm systems.





For alarm systems



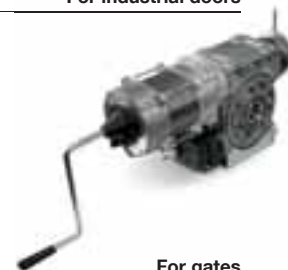
For blinds and rolling shutters



For venetian blinds



For industrial doors



For gates



For garage doors



For road barrier systems



For parking systems



For lighting systems



Nice History



1993

The first transmitters: very Nice!

With Nice, transmitters become an object to show: functional and powerful, but miniaturized and elegant. The transmitter itself, shown in the car or attached to the key ring, becomes the Nice first way of communication which rouses an immediate request through the most powerful media: the word-of-mouth.

1995

Handy design: effortless and with just one hand.

In its first generation of motors Nice conceives unlocking mechanisms made of simple keys, easy to activate with just one hand. There will no longer be any waiting under the rain, physical effort or painstaking research for a key which cannot be found, while getting into the house with your hands full of shopping bags or while carrying a baby.

2003

BUS systems: much more simplicity.

Nice puts on the market the Nice BlueBUS system which changes the concept of automation by making installation really easy and quick: nothing but two wires now connect all system devices, which can be later amplified with the same simplicity.

The absence of polarity and the clamps identified by the serigraphies, make the connection even easier and really error-free.

2005

The modular control: choice and rationality.

Nice goes beyond the idea of finished products introducing the concept of modularity: a wide product range available without the problem of the warehouse management. Unique parts, composed in a different way, generate a wide range of "custom-made" solutions: it is the innovative technology of the NiceWay transmitters.



2000
"International
Design Gallery"
Expo 2000
Hannover

ADI

2001
Best of Category
"Design for the
Environment"
XIX Compasso
d'Oro



2002
Permanent
Collection
at The Museum
of Design



1999, 2003,
2005
"Intel Design
Award"



1999, 2003,
2005
"ADI Design
Index"



2005
"Trophée
d'Argent"
Trophée
du Design
Batimat



2006
"Innovation Prize"
R+T Stuttgart



2007
"Innovation &
Design Award"
LivinLuce



2008
"Grandesign Etico
International Award"



2007

Opera marks the future of the automation.

Anticipating installer requests, Nice presents the innovative Opera system which makes the work for the installer even easier thanks to the remote control of any automation system via PC and PDA, while the end-user can manage home automations via mobile and Smartphone, PC and PDA.

2008

Solemyo: energy in nature!

With Nice, solar power now allows to "move" automations even far away from the electrical loads, avoiding the inconvenience of expensive masonry or unsightly wiring ducts for the control wires. It is the Nice wireless technology: an ecological and smart system, energy-saving.

2009

NiceHome System, security combines with automation.

Nice combines the simplicity and completeness of its control devices with the professionalism of the alarm systems the Group companies have developed according to their 30-year experience. Apart from the alarm system, the user can directly manage up to 16 controls for automations, lighting and electrical loads. Everything with a 100% wireless solution: the maximum safety with the maximum ease.

2011

Nice + FontanaArte: light is movement.

Thanks to the acquisition of FontanaArte, Nice enters the lighting system complementary field with a wide range of integrated home solutions: a new angle and richness to its pursuit of elegance and excellence, to offer an innovative contribution to the needs of everyday life.

FontanaArte S.p.A.

Founded in 1932 by the architect Gio Ponti, FontanaArte is one of the Italian design firms which has "made history in lighting and furnishings" in Italy and around the world. Featuring a design culture which has founded its main concept upon the interplay between technology and beauty, FontanaArte has created a series of timeless objects of splendid shapes and forms, many of which have become design classics on exhibit in some of the world's most important museums.

www.fontanaarte.com



Nice Headquarters

“Devised by Italian minds, unprovoking yet unmistakable in design, with a sense of movement which transmits and knows how to match technological contents in a playful way”

Lauro Buoro
Chairman of Nice S.p.A.

A Nice Place.

A new building, large and functional, to meet the needs of an ever-growing firm, reflecting its international focus and product personality: a training area and a showroom to interact with customers; an auditorium to foster institutional relationships with the world around. At the core of its architecture, Nice has placed the person.

To “feel good” is a priority for Nice: for its staff the company offers gym, sauna, Turkish bath, bar.

Environmentally conscious art installations surround a pond, while the cultivations of the garden change with the seasons: this is the Nice gift to nature.

Project by Studio Carlo Dal Bo.

Come and discover the Nice world:
www.niceforyou.com



Nice Centre for Technology

Nice has made significant investments to guarantee even higher quality standards, which not only comply with directives and regulations, but also allow a continuous product improvement.

Through its advanced laboratories Nice carefully tests and controls its products every day in order to grant safety, quality, reliability and durability.

The Nice laboratories complies with ISO 9001 certification, known all over the world for the quality management, besides of being in accordance with EN 17025 standards which set the general requirements for testing labs.

All the Nice CE certified products comply with the relevant European Directives and the leading internationally recognized standards.

The Nice laboratories have been recognized by:

- LCIE (France)
- TÜV Rheinland (Germany)
- Nemko (Norway)
- Cetecom (Germany)
- FCC (USA)
- IC (Canada)
- Intertek (Sweden)

Nice Life

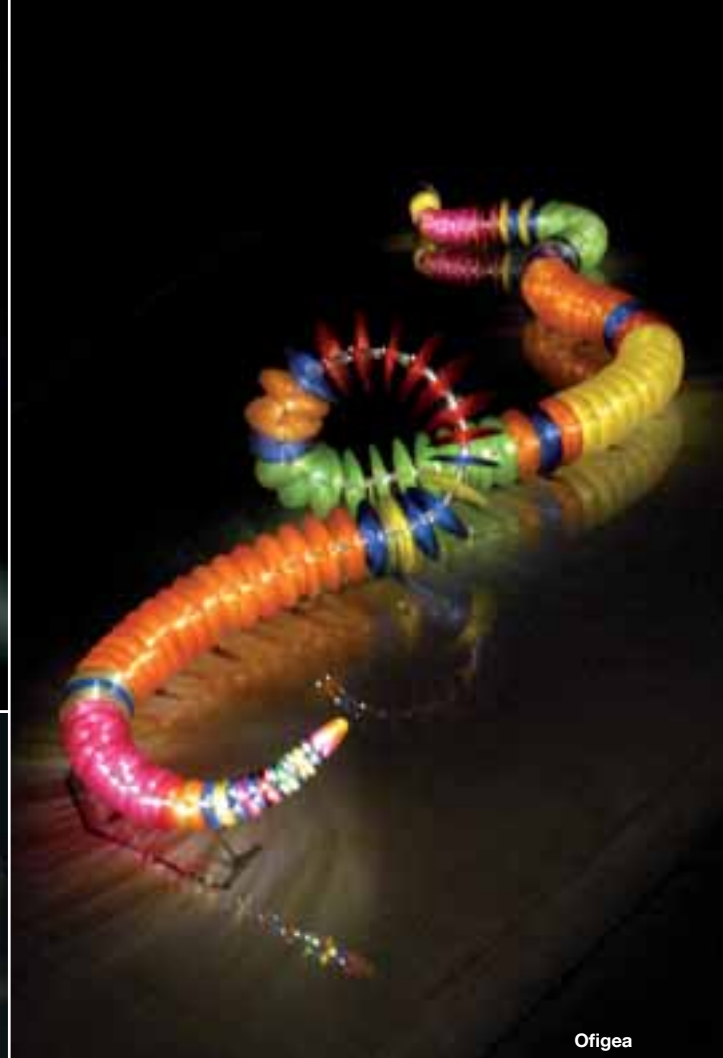


Be Extreme Be Nice

For freedom, for the contact with nature and the need for environmental awareness; for the team effort and the ability to handle the unpredictable,

Nice chooses to invest in the sport of sailing by participating in the forefront of the international Extreme 40 circuit.

... for a world without barriers...



Nice Arts

In the frame of the increasingly need for renewal and changing values in sustainability, Nice contributes defining new scenarios through the promotion of eco-compatible design.

With the “Nice Arts” project in 2010 Nice is ranked among the top 265 in excellence representing Italy at Shanghai World Expo: “Better City, better life”.

Lighting sculptures by
Jacopo Foggini

Plasteroid
Interni Mutant Architecture & Design, 2011

Golden Fleece
Interni Think Tank, 2010

Ofigea
Interni Green Energy Design, 2008

Golden Fleece and Ofigea are now installed at the Nice Headquarters.

With the “F.e.e.l.” project (For Everyone Everywhere Liberty) Nice promotes activities, initiatives and products which give greater freedom in movement and more individual autonomy even to those who have special needs, such as the elderly and the disabled.



Nice systems for industrial closures

Easy to install and program automation systems for made-to-measure solutions.

Nice is presenting the series of gearmotors **for automating sectional doors, shutters and high speed doors for industrial use.**

Advanced technology, quality of details, and durable and reliable operation stand behind these automations having safety requirements and performance characteristics compliant with the most recent European standards and directives.

To make your selection easier, Nice proposes a series of configurations in which you will find the codes indicated in each section.

To define the ideal gearmotor according to the model, it is possible to choose the following features*:

- Mechanical or electronic limit switch
 - Limit switch rpm
 - Shaft diameter
 - Type of manual emergency release
 - For the motors of the HDF and RDF series, the distance between the shaft centre and the end of the fixing bracket.
- The relevant control unit (UST series) is to be matched to the gearmotor.

On the following pages you will find the **control units** recommended for each gearmotor type indicated. The stations can be customised both by applying optional additional modules dedicated to specific functions on them and with button, plug and signalling LED variants.

The Nice Industrial range is also offered in **preassembled kits** including: motor, station and cables; everything you need is inside the packing, without having to make additional connections.

*(not all combinations are possible; consult the tables and technical drawings in each section to this regard)



For SW/SD series sectional balanced doors

Gearmotors for industrial sectional doors in various versions, also with electronic limit switch.

Flexible technology with the possibility of choosing between different manual emergency releases: with handle, cable or chain.

For HDF series high speed doors

Gearmotors for industrial high speed doors equipped with electronic limit switch to get a practical and versatile solution suited to all types of applications. The inverter checks the speed and therefore optimises the efficiency of the complete system.

For RD and RDF series rolling shutters with chain transmission

Gearmotors for rolling shutters and roller grilles for industrial use with the highest safety level, also owing to the integrated parachute device and the possibility to connect safety systems such as optical or resistive sensitive edges.

For Combi-Control and UDL series loading ramps

Control units for high flexibility loading ramps. It is possible to choose from different programs, both automatic and in deadman mode.

Combi-Control is a combined station to simultaneously control the loading ramp and the associated door.

Nice Industrial Doors

4 11	The Nice World
12 13	Nice for industrial applications
16 24	Applications for sectional balanced doors
24 33	Applications for high speed doors
34 51	Applications for rolling shutters
52 67	Applications for shutters with chain transmission
68 73	Control units
74 76	Accessories and cables
78 81	Control electronics and accessories

**Applications
for sectional balanced
doors**

16|17 Selection guide
18|19 SW/SD Series Gearmotors
20|23 Technical drawings

**Applications
for high speed doors**

24|25 Selection guide
26|27 HDF Series Gearmotors
28|33 Technical drawings

**Applications
for rolling shutters**

34|35 Selection guide
36|37 RDF Series Gearmotors
38|51 Technical drawings

**Applications
for shutters with
chain transmission**

52|53 Selection guide
54|57 RD Series Gearmotors
58|67 Technical drawings

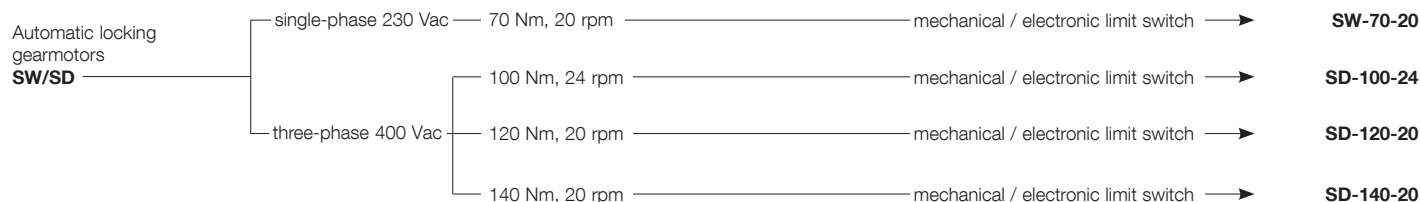
**Control units
and accessories**

68|69 Selection guide
70|71 Stations for sectional doors,
rolling shutters and high speed
doors UST1, UST1K, UST2,
UST1-FU
72 Stations for loading ramps
UDL1, UDL2
73 Stations for sectional doors,
shutters and loading ramps
Combi-Control

Nice SW/SD series for sectional doors selection guide

Follow the arrow and choose the right product

For sectional balanced doors



Indication of the station choice to combine with the SW/SD gearmotors

Control unit	SD/SW Series Gearmotors			
	SW-70-20-KU SW-70-20-KE SW-70-20-E	SD-100-24-KU SD-100-24-E SD-100-24-KE SD-100-24-KE2	SD-120-20-KU SD-120-20-E SD-120-20-KE SD-120-20-KE2	SD-140-20-KU SD-140-20-E SD-140-20-KE SD-140-20-KE2
UST2*		•	•	•
UST1	•	•	•	•
UST1K-2,2 kW	•	•	•	•
UST1K-1,1 kW	•	•	•	•

*to use only for gearmotors **with mechanical limit switch**.

Important note:

The weight lifted cannot be the only criteria used for choosing the gearmotor.

The fall of a sectional balanced door can be avoided if the gearmotor is able to support the wing weight even if the spring breaks.

The static overturning moment is the maximum load allowed for the mechanism at the time the spring breaks.

The Mstat static overturning moment is calculated with the following formula:

$M_{stat} [Nm] = \text{wing weight} [N] \times \text{cable winder drum radius} [m]$

Considering that two balancing springs can yield at the same time, it is recommended to size the gearmotor so that it is able to support

- the total weight of the wing when there are one or two springs
- 2/3 of the weight of the wing when there are three springs
- 1/2 of the weight of the wing when there are four springs.

When making this choice, the considerably greater gearmotor breaking load is not to be contemplated. In the case of cable winder drums of the incremental type, the greater winding diameter is to be considered.

Consider the maximum sustainable force of the cables.

SW/SD



Nice SW/SD gearmotors for sectional doors

SD series
(with handle)



Electromechanical gearmotor for sectional doors up to 550 kg, with integrated brake.
Versions for 230 Vac single-phase and 230/400 Vac three-phase, with mechanical or electronic limit switches.

Simple installation:

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

Complete Nice gearmotor-cable-station kits are directly wired in production and allow installation time to be further reduced.

Sturdy

Gearmotor with bronze gears, with permanent lubrication

Practical:

Release available in 3 versions:

- cable release
- handle-operated 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:

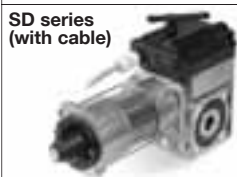
gearmotors compliant with the most recent European standards and directives in terms of safety and technology.

Smart

UST1 series control unit separated from the gearmotor, simple and reliable, equipped with:

- mechanical or electronic limit switches
- possibility to connect photoelectric barriers and optical or resistive sensitive edges 8.2 kΩ
- deadman or automatic control, control via radio or via cable
- possibility to expand with additional modules.

SD series
(with cable)



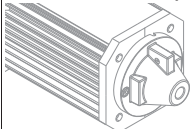
SD series
(with chain)



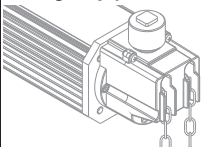
SW series



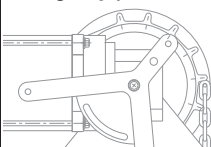
Handle-operated emergency (KU series) and cable release (E series)



Chain-operated emergency (KE series)



Chain-operated emergency (KE2 series)

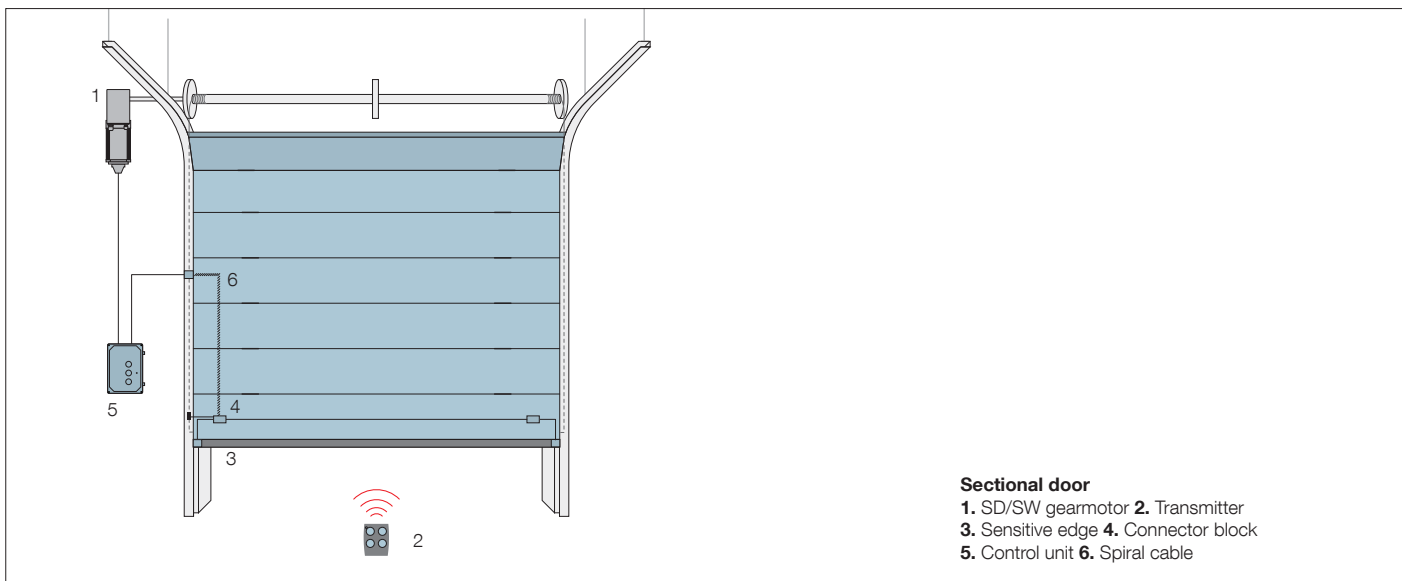


Complete preassembled kits

Code	Description
NDCK0009	SW-70-20 gearmotor with electronic limit switch and release with light 5 m chain, UST1K-1.1kW station, Schuko plug, 7 m cable
NDCK0129	SD-100-24 gearmotor with electronic limit switch and cable release, UST1K-1.1kW station, EEC plug, 5 m cable
NDCK0013	SD-100-24 gearmotor with electronic limit switch and release with light 5 m chain, UST1K-1.1kW station, EEC plug, 5 m cable
NDCK0067	SD-100-24 gearmotor with electronic limit switch and release with 5 m chain, UST1K-1.1kW station, EEC plug, 5 m cable
NDCK0024	SD-100-24 gearmotor with mechanical limit switch and release with light 5 m chain, UST1 station with K1 module, EEC plug, 5 m cable
NDCK0043	SD-100-24 gearmotor with mechanical limit switch and cable release, UST2 station, EEC plug, 7 m cable
NDCK0014	SD-100-24 gearmotor with mechanical limit switch and release with light 5 m chain, UST2 station, EEC plug, 7 m cable
NDCK0249	SD-140-20 gearmotor with electronic limit switch, cable release and Ø 25.4 mm shaft, UST1K-1.1kW controller, EEC plug, 5 m cable
NDCK0154	SD-140-20 gearmotor with electronic limit switch, release with light 5 m chain and Ø 31.75 mm shaft, UST1K-1.1kW station, EEC plug, 5 m cable

Gearmotors

Code	Description
NDCM0022	SD-100-24 gearmotor with mechanical limit switch and release with light 5 m chain
NDCM0019	SD-100-24 gearmotor with mechanical limit switch and cable release
NDCM0023	SD-100-24 gearmotor with electronic limit switch and release with light 5 m chain
NDCM0051	SD-100-24 gearmotor with electronic limit switch, release with light 5 m chain and Ø 31.75 mm shaft

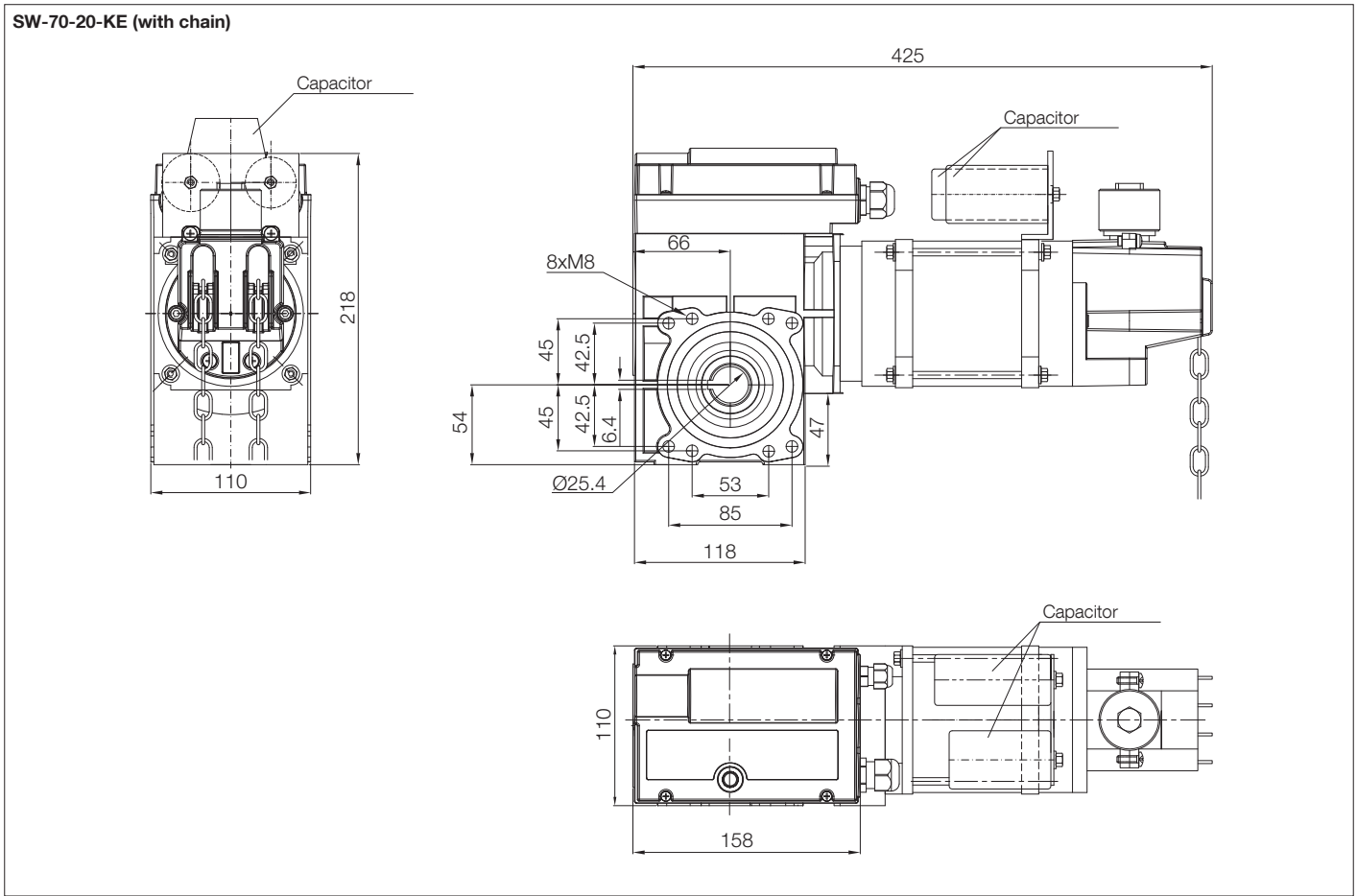
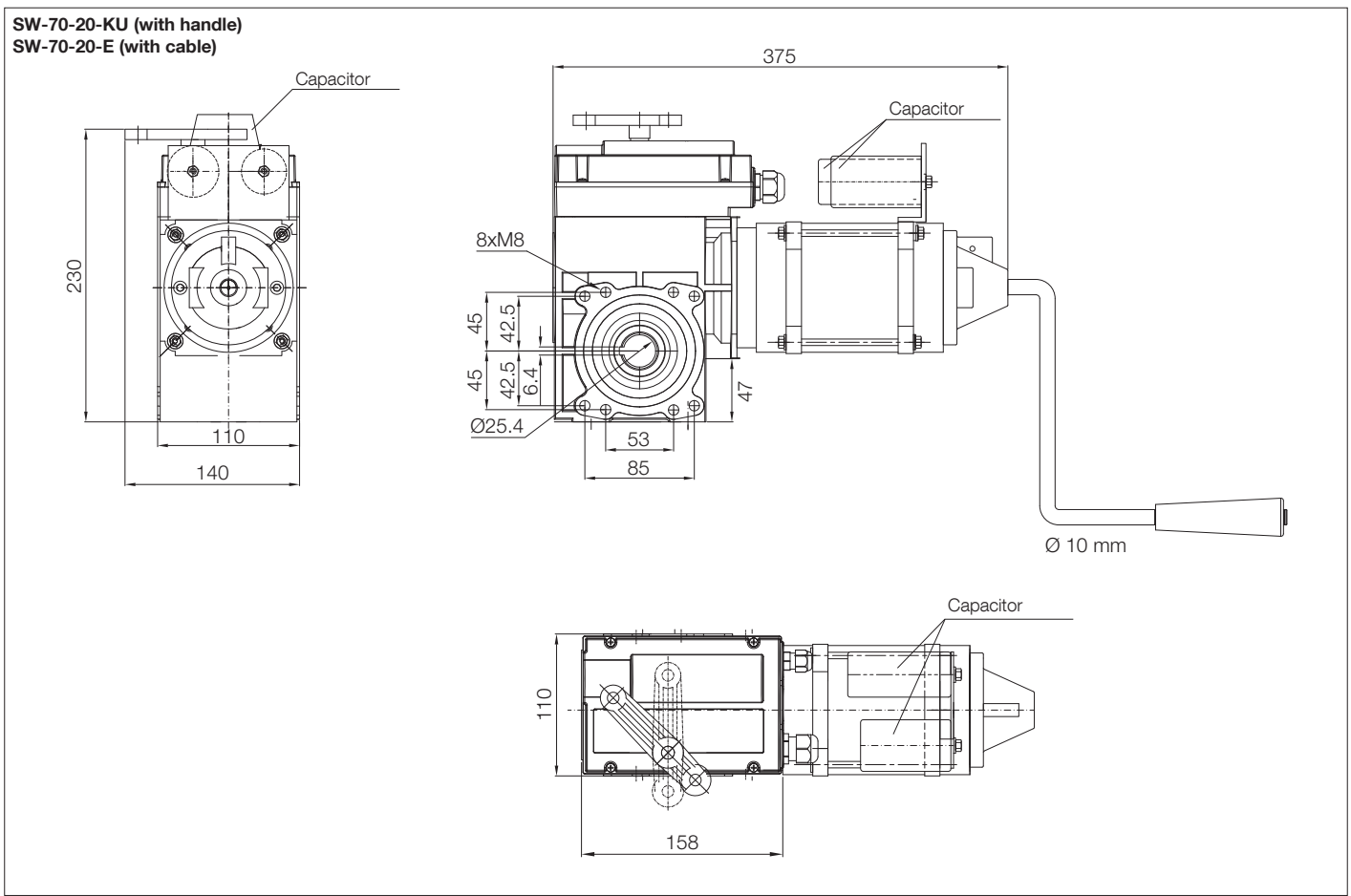


Technical data

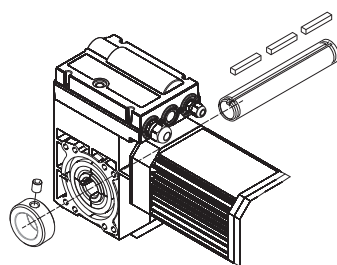
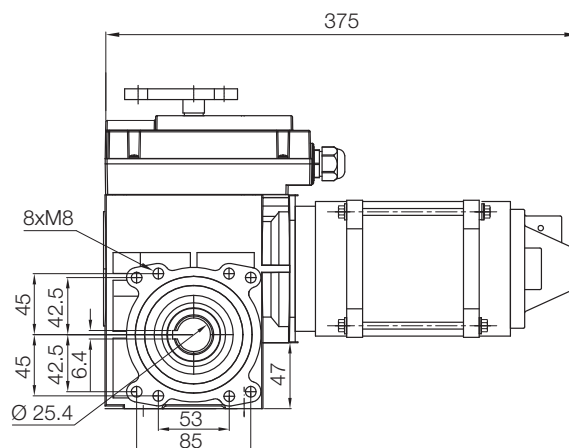
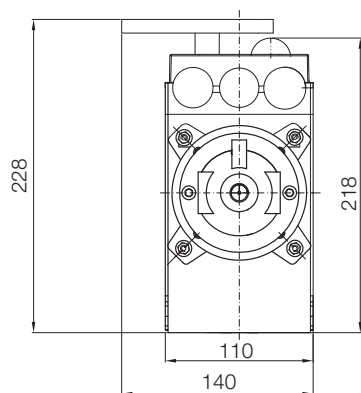
Type	SW-70-20	SD-100-24	SD-120-20	SD-140-20
Shaft Ø (mm)		25,4		25,4/31,75
Max. torque (Nm)	70	100	120	140
Rated torque (Nm)	60	80	100	120
Static overturning moment (Nm)		230		440
Weight lifted* (kg)		300		550
Absorbed power (kw)	0,20	0,37		0,55
Working voltage (V/Hz)	1x230 V 50 Hz	3x230V/3x400V 50Hz		
Service factor (ED)	S3-20%	S3-60%		
Connection cable (no. x mm²)	3 x 1,5	5 x 1,5		
Nominal current (A)	3,45/2,0	3,1	2,6/1,5	3,45/2,0
Limit switch rpm	15			
Operating temperature (°C)	-5 ÷ +40			
Noise dB(A)	<70			
Protection rating (IP)	IP54			
Weight (kg)	11,5	11,1	11	12

* For balanced doors with 1-4 compensating springs with a Ø 160 mm diameter cable winder drum, observe the permitted cable forces, the danger warnings and the general rules of safety.

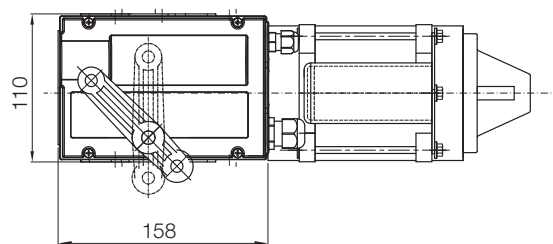
Nice SW/SD series technical drawings for sectional doors



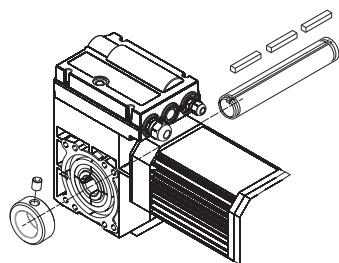
SD-100-24-E
SD-120-20-E
SD-140-20-E



In the gearmotors with diameter equal to 31.75 mm,
use a locking collar from the side opposite the shaft
to prevent it from becoming damaged.



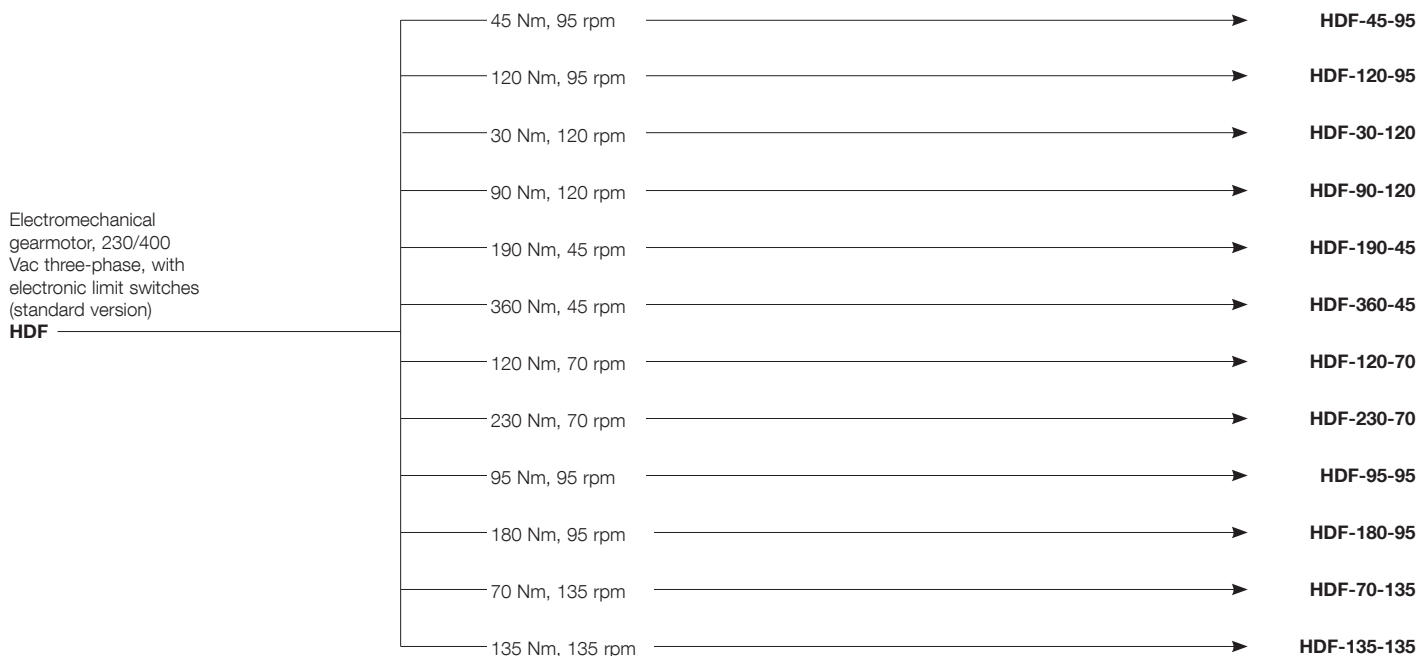
SD-100-24-KE2
SD-120-20-KE2
SD-140-20-KE2



Nice HDF series for high speed doors selection guide

Follow the arrow and choose the right product

For high speed doors



Selection guide of the acceptable maximum weights according to the model and winding pipe with inverter at 50 Hz

Steel pipe EN 10220 (mm)	HDF series											
	45-95	120-95	30-120	90-120	190-45	360-45	120-70	230-70	95-95	180-95	70-135	135-135
108,0 x 3,6	46	46	31	93	187	280	93	187	98	187	612	820
133,0 x 4,0	37	37	25	76	152	228	76	152	80	152	499	668
159,0 x 4,5	31	31	21	64	128	191	64	128	67	128	418	560
177,8 x 5,0	28	28	19	57	114	171	57	114	60	114	375	502
193,7 x 5,4	26	26	18	53	105	158	53	105	55	105	344	461
219,1 x 5,9	23	23	15	46	93	139	46	93	49	93	305	405

The weight table is based on a friction value of 20%, with a sheet thickness of 2 mm.

For frequencies greater than 50 Hz the maximum weight is reduced by 5% for each frequency increase of 10%; the values shown in the table are calculated for operation with max. 80 Hz.

Please note:

If gearmotor operation without inverter is planned, it must be clearly indicated in the order because in this case it may be necessary to equip the gearmotors with a more powerful brake.

HDF



Nice HDF series gearmotors for high speed doors

HDF series
(with handle)



Electromechanical gearmotor for high speed doors, with electronic* limit switches, handle-operated emergency (KU series), integrated parachute device, brake and fixing bracket.

Simple installation:
The HDF series is to be installed directly on the shaft of the door (Ø 25 mm, Ø 30 mm and Ø 40 mm).
Cables equipped with connectors simplify electrical connections.
Complete gearmotor-cable-inverter-station kits are directly wired in production and allow installation time to be further reduced.

Compact and efficient:
torque up to 360 Nm
speed up to 135 rpm at 50 Hz.

Practical: release available with handle-operated emergency.

Unbeatable safety:
due to the integrated antifall safety system and the chance to connect safety devices and optical or resistive 8.2 kΩ sensitive bars, the gearmotors are compliant with the most recent European standards and directives.

Recommended control unit UST1-FU
UST1-FU with integrated inverter.

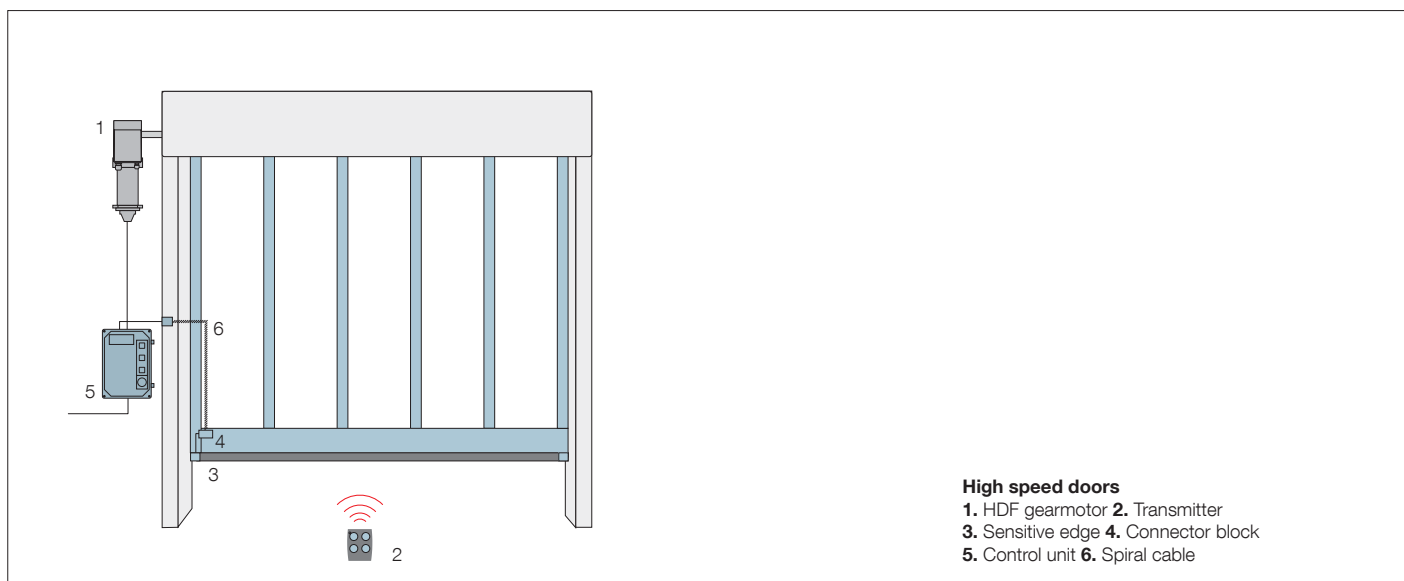
*Versions with mechanical limit switch for use without inverter, to be associated with the other UST series stations, are also available.

Complete preassembled kits

Code	Description
NDCK0408	HDF-30-120 gearmotor with electronic limit switch and shaft diameter of 30 mm, UST1-FU station with K5 module and Schuko plug, 1.5 kW inverter, shielded 5 m cable
NDCK0209	HDF-95-95 gearmotor with electronic limit switch and shaft diameter of 40 mm, UST1-FU station with K5 module and Schuko plug, 2.2 kW inverter, shielded 5 m cable

Gearmotors

Code	Description
NDCM0052	HDF-30-120 gearmotor with mechanical limit switch and shaft diameter of 30 mm
NDCM0247	HDF-45-95 gearmotor with electronic limit switch and shaft diameter of 30 mm
NDCM0055	HDF-135-135 gearmotor with mechanical limit switch and shaft diameter of 40 mm

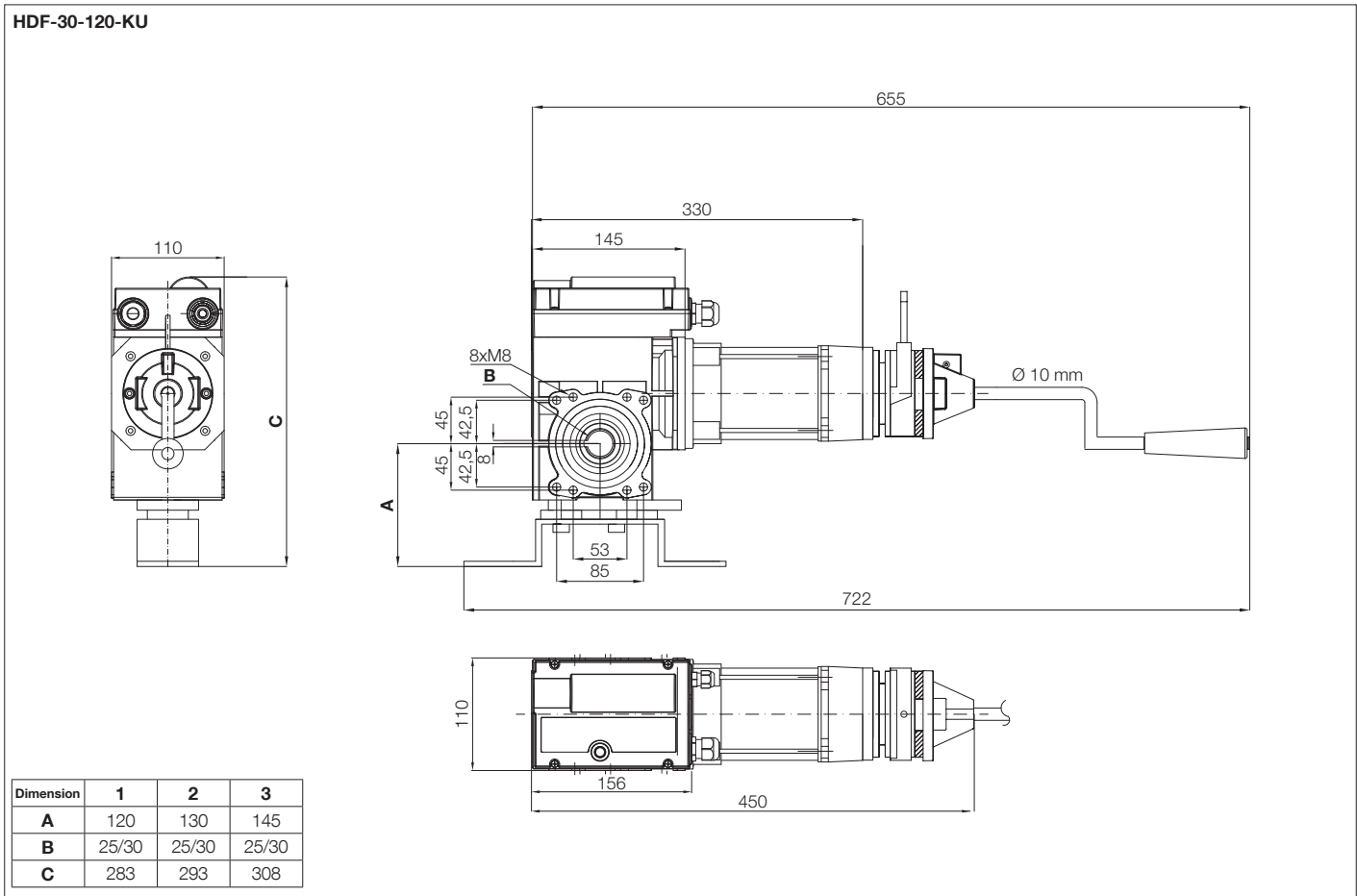
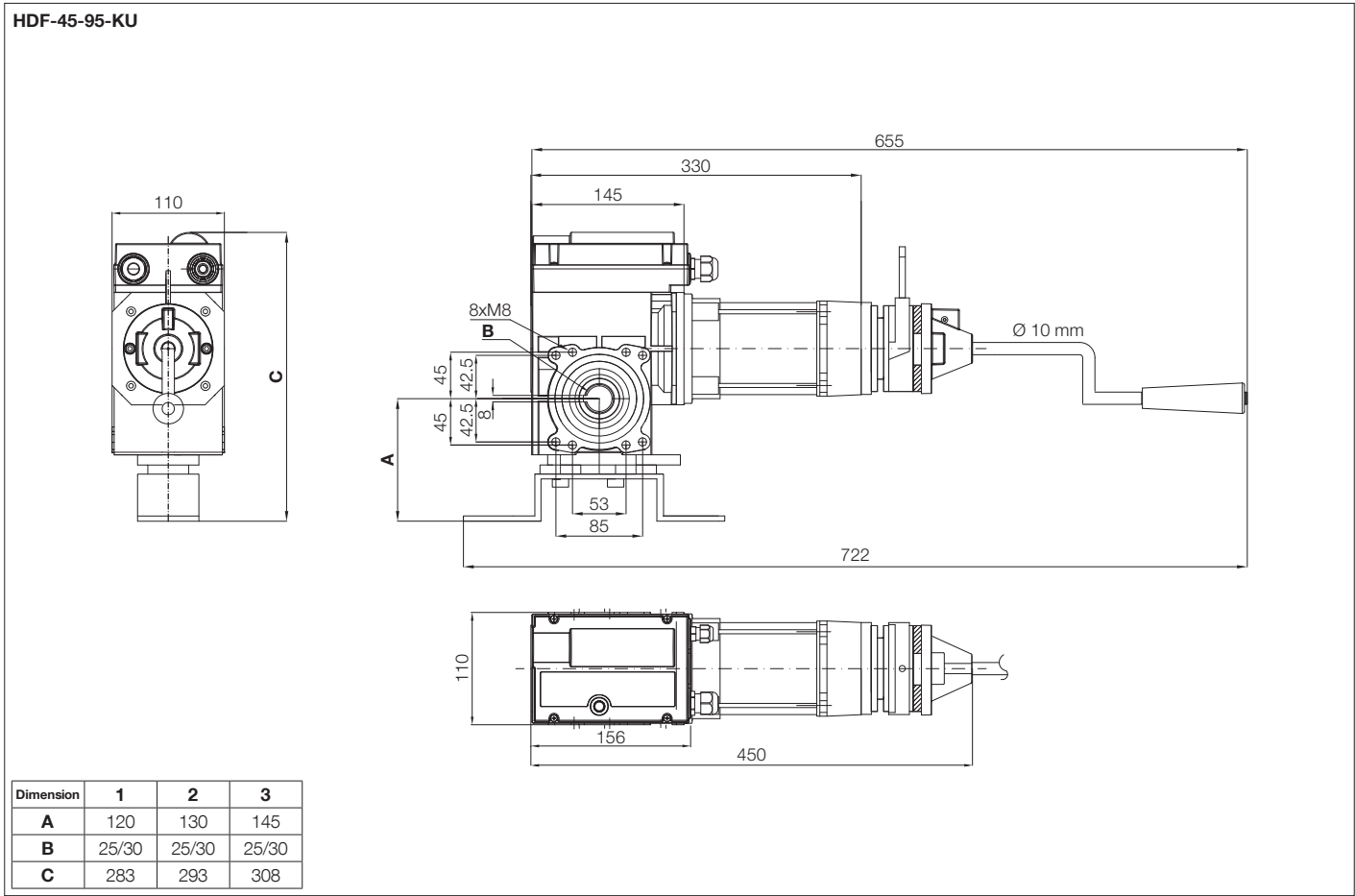


Technical data

Type	HDF-45-95	HDF-120-95	HDF-30-120	HDF-90-120	HDF-190-45	HDF-350-45
Shaft Ø (mm)	25/30	25/30	25/30	25/30	40	40
Max. torque (Nm)	45	120	33	90	190	350
Rated torque (Nm)	36	100	30	80	170	300
Speed at 50 Hz (rpm)	95	95	120	120	45	45
Motor power (kW)	0,75	1,1	0,75	1,1	1,5	2,2
Limit switch rpm	15	15	15	15	10-20	10-20
Working voltage (V/Hz)	3x230 V / 3x400 V 50 Hz					
Duty Cycle	S 3 - 60%					
Connection cable (no. x mm ²)	5 x 1,5					
Operating temperature (°C)	-5 ÷ +40					
Noise dB(A)	<70					
Protection rating (IP)	IP 54					
Weight (kg)	16,9	16,9	15,8	15,8	30,5	34

Type	HDF-120-70	HDF-230-70	HDF-95-95	HDF-180-95	HDF-70-135	HDF-135-135
Shaft Ø (mm)	40	40	30/40	30/40	30/40	30/40
Max. torque (Nm)	120	230	95	180	70	135
Rated torque (Nm)	100	200	90	150	55	100
Speed at 50 Hz (rpm)	70	70	95	95	135	135
Motor power (kW)	1,5	2,2	1,5	2,2	1,5	2,2
Limit switch rpm	10-20	10-20	10-20	10-20	10-20	10-20
Working voltage (V/Hz)	3x230 V / 3x400 V 50 Hz					
Duty Cycle	S 3 - 60%					
Connection cable (no. x mm ²)	5 x 1,5					
Operating temperature (°C)	-5 ÷ +40					
Noise dB(A)	<70					
Protection rating (IP)	IP 54					
Weight (kg)	30,5	34	30,5	34	30,5	34

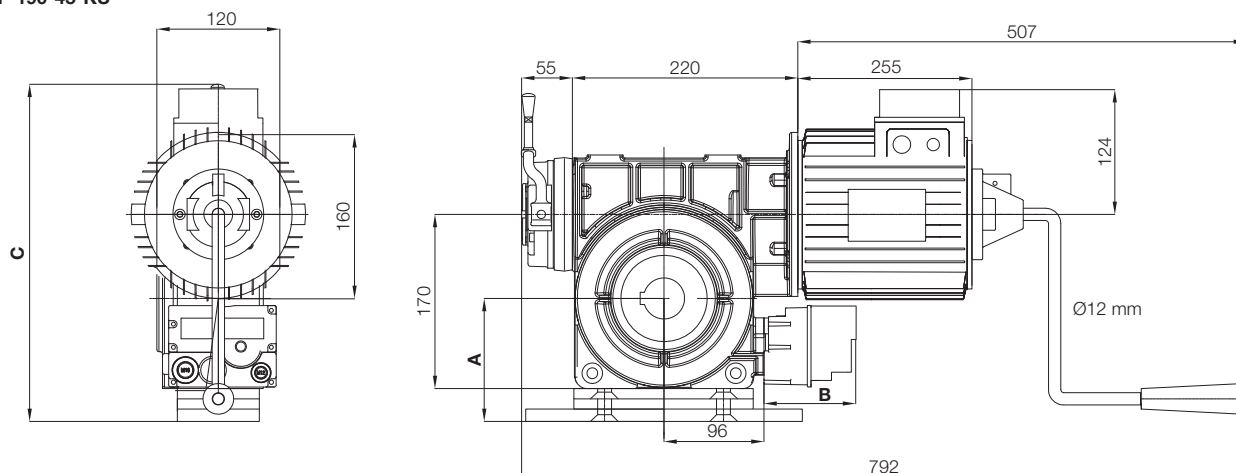
Nice HDF series technical drawings for high speed doors



Key

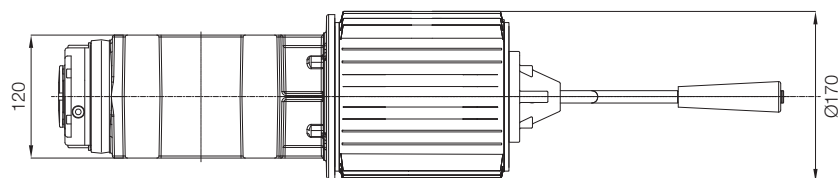
Dimension A: shaft centre - fixing bracket lower edge distance | **Dimension B:** limit switch housing length | **Dimension C:** gearmotor construction height | **Dimension D:** shaft diameter
Dimension E: 8 mm for 30 mm shaft; 12 mm for 40 mm shaft | **1, 2, 3:** possibilities available

HDF-190-45-KU

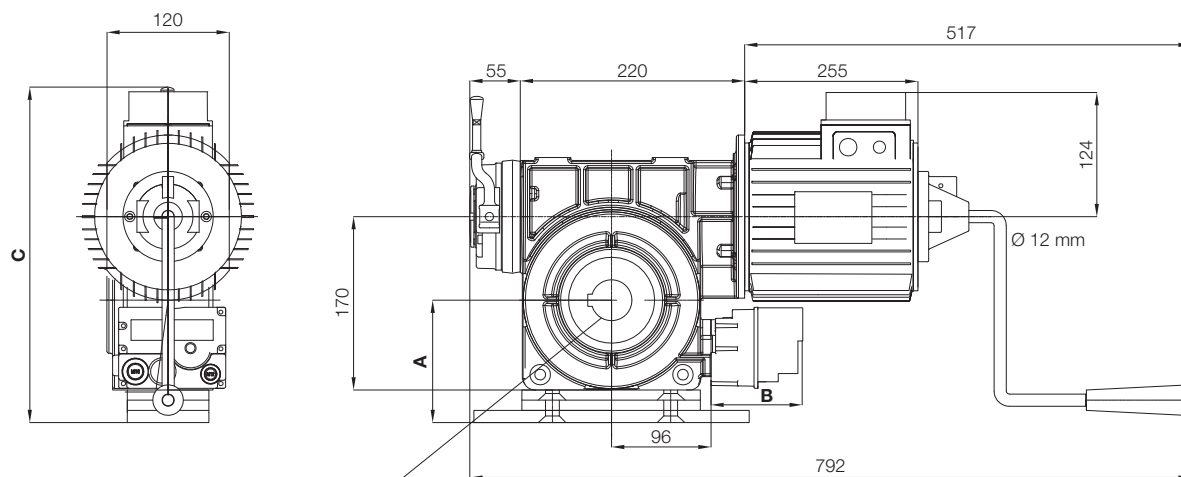


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

B = 90 electronic limit switches
B = 150 mechanical limit switches

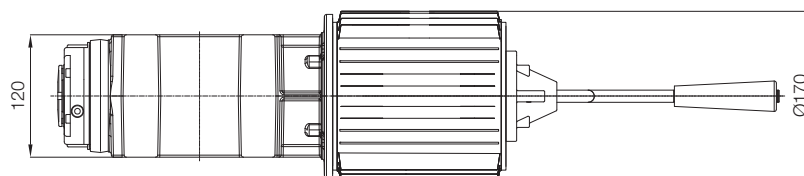


HDF-120-70-KU

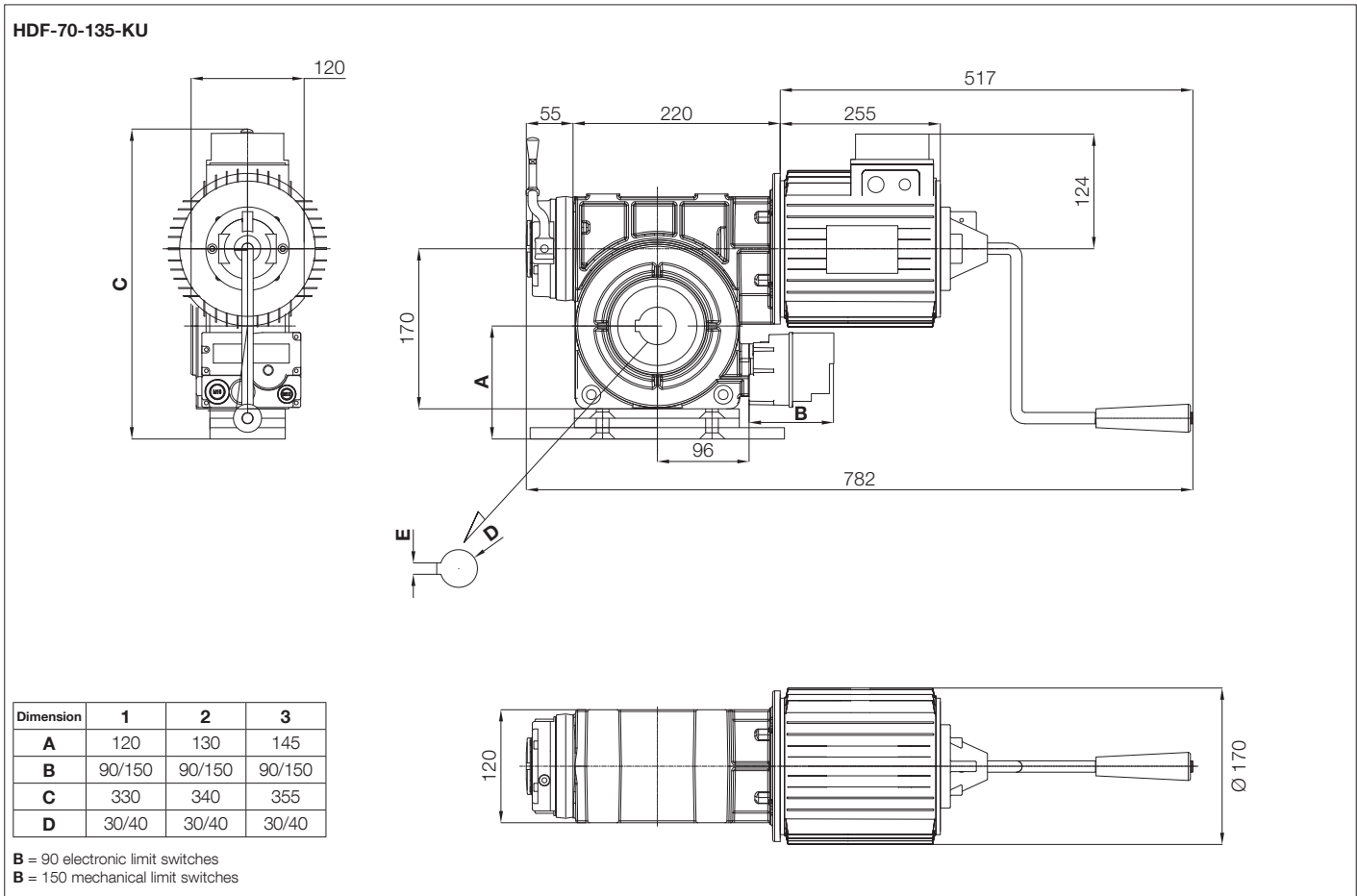
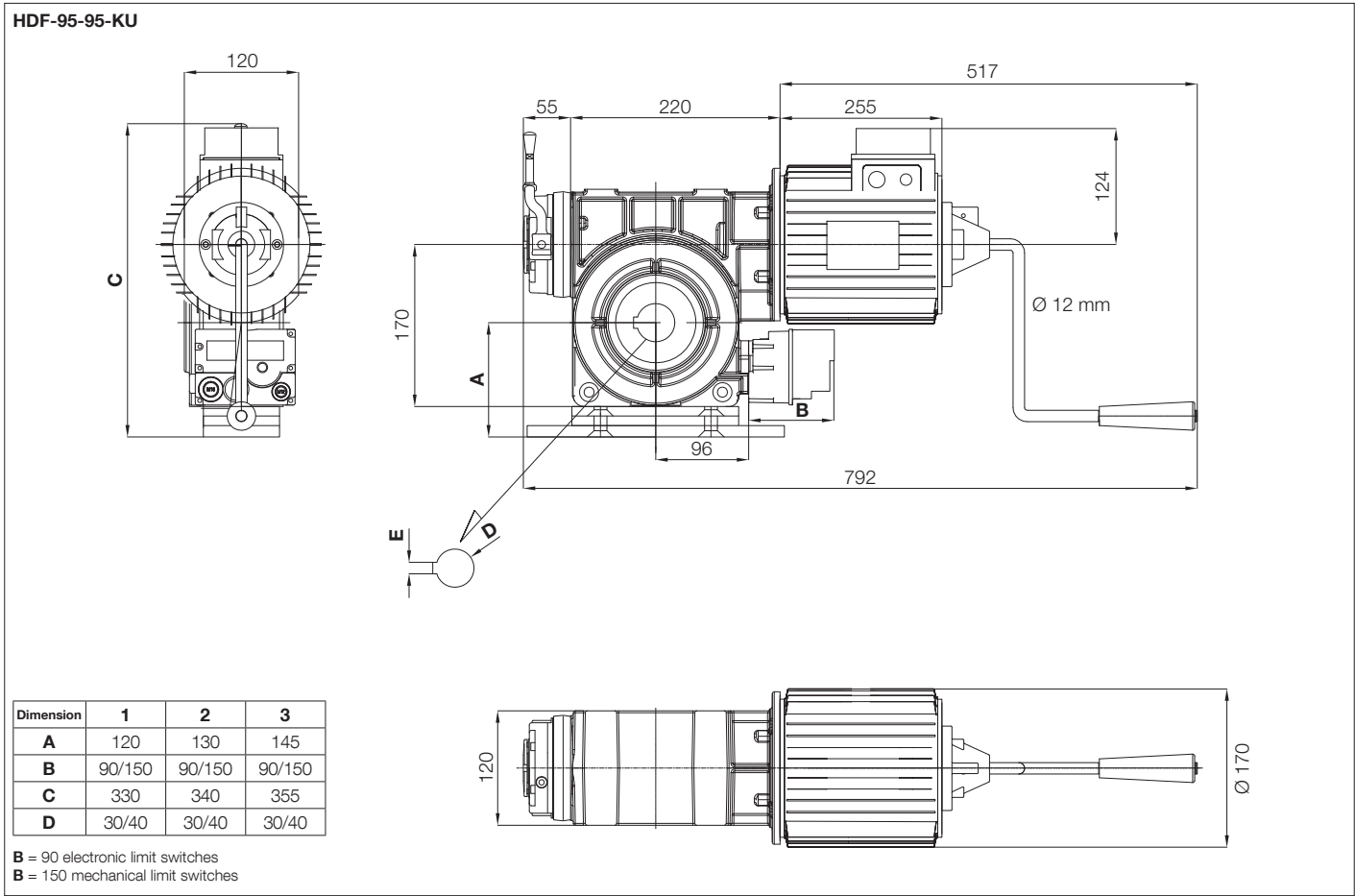


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

B = 90 electronic limit switches
B = 150 mechanical limit switches



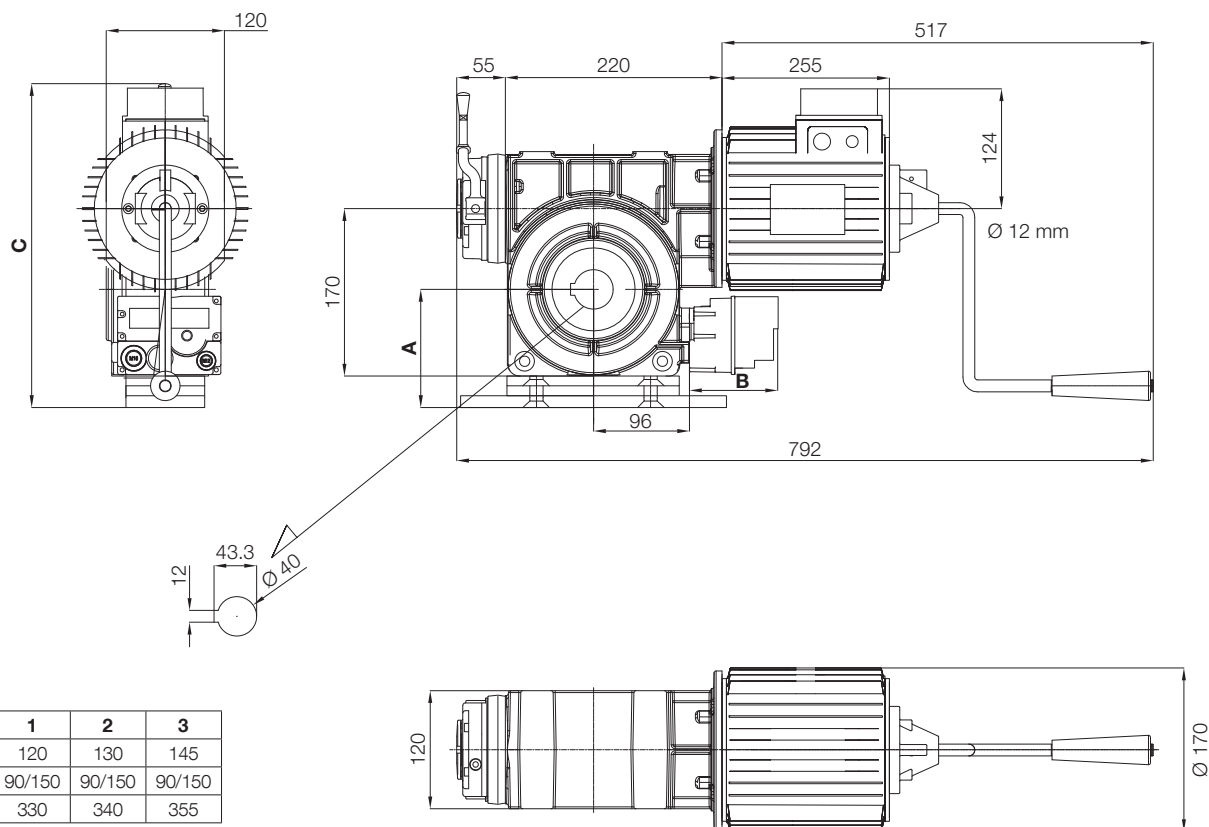
Nice HDF series technical drawings for high speed doors



Key

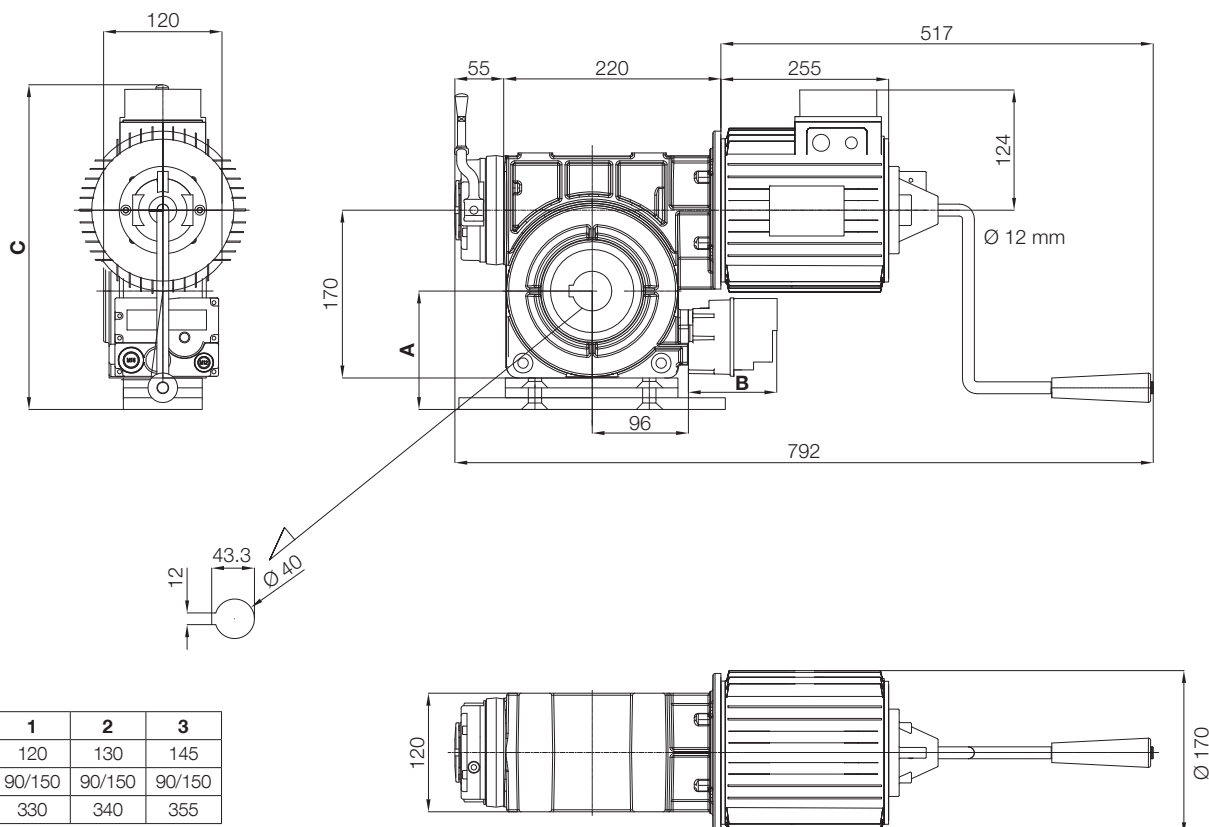
Dimension A: shaft centre - fixing bracket lower edge distance | **Dimension B:** limit switch housing length | **Dimension C:** gearmotor construction height | **Dimension D:** shaft diameter
Dimension E: 8 mm for 30 mm shaft; 12 mm for 40 mm shaft | **1, 2, 3:** possibilities available

HDF-360-45-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

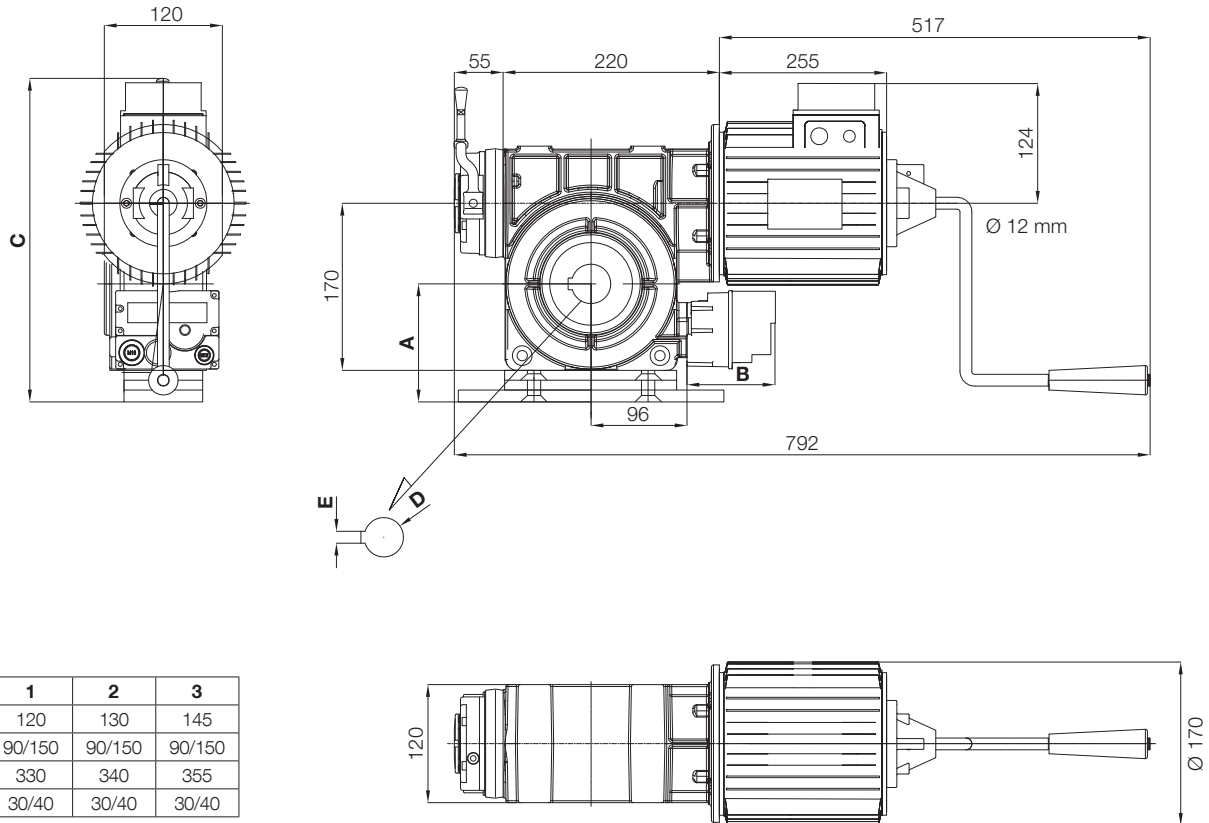
HDF-230-70-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

Nice HDF series technical drawings for high speed doors

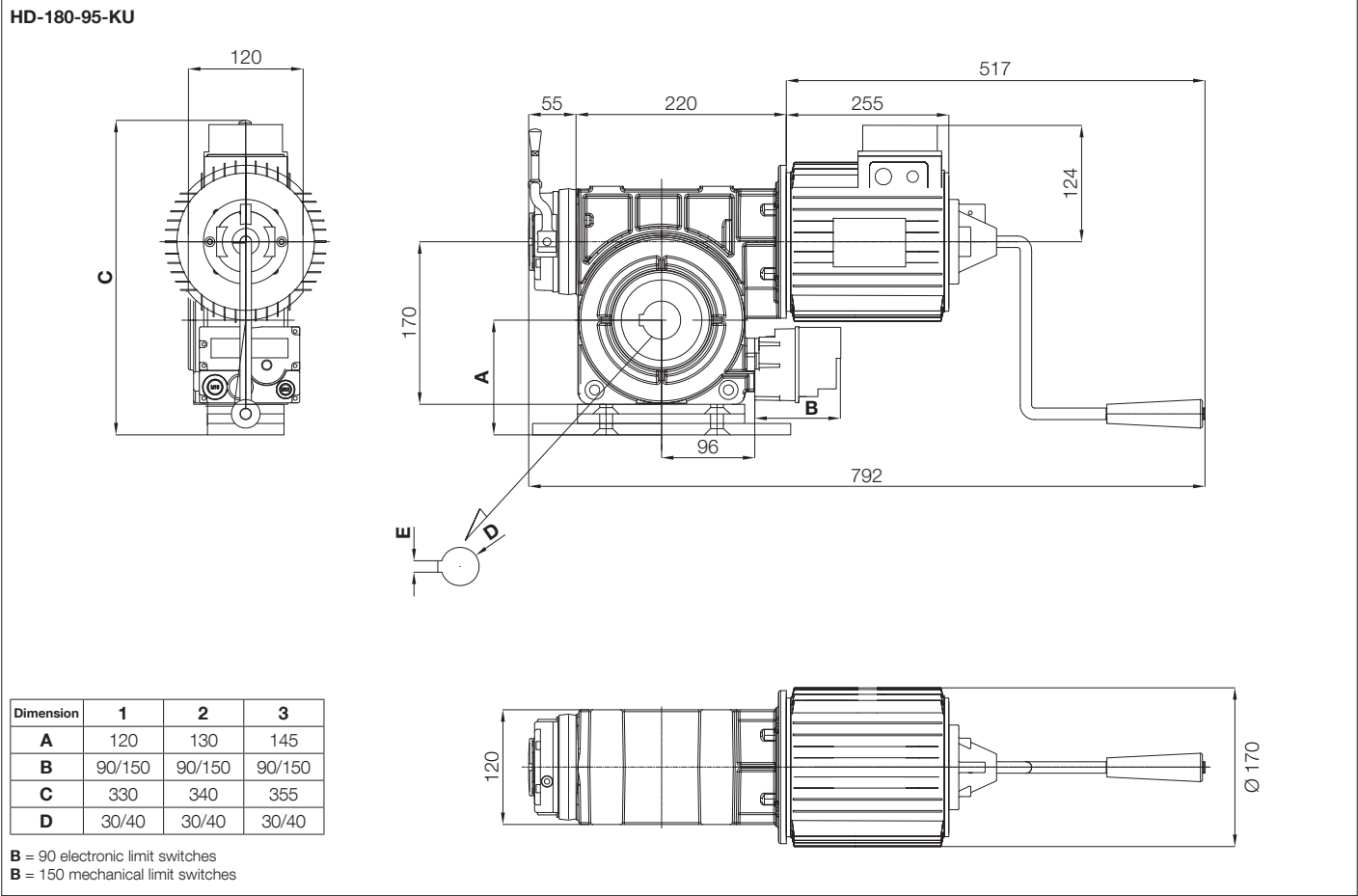
HD-135-135-KU



Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355
D	30/40	30/40	30/40

B = 90 electronic limit switches
B = 150 mechanical limit switches

Key
Dimension A: shaft centre - fixing bracket lower edge distance | **Dimension B:** limit switch housing length | **Dimension C:** gearmotor construction height | **Dimension D:** shaft diameter
Dimension E: 8 mm for 30 mm shaft; 12 mm for 40 mm shaft | **1, 2, 3:** possibilities available



Nice RDF series for rolling shutters selection guide

Follow the arrow and choose the right product

For rolling shutters

Three-phase
electromechanical,
gearmotor 400 Vac,
with mechanical or
electronic limit switches
RDF

140 Nm, 20 rpm	→	RDF-140-20
220 Nm, 15 rpm	→	RDF-220-15
290 Nm, 15 rpm	→	RDF-290-15
380 Nm, 15 rpm	→	RDF-380-15
450 Nm, 15 rpm	→	RDF-450-15
550 Nm, 12 rpm	→	RDF-550-12
750 Nm, 9.5 rpm	→	RDF-750-9.5
850 Nm, 10 rpm	→	RDF-850-10
1100 Nm, 10 rpm	→	RDF-1100-10
1400 Nm, 7 rpm	→	RDF-1400-7
350 Nm, 24 rpm	→	RDF-230-24
350 Nm, 24 rpm	→	RDF-350-24
500 Nm, 24 rpm	→	RDF-500-24
750 Nm, 24 rpm	→	RDF-750-24
950 Nm, 24 rpm	→	RDF-950-24
1250 Nm, 24 rpm	→	RDF-1250-24
1400 Nm, 24 rpm	→	RDF-1400-24

Max. shutter weight (kg):

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	
Gearmotor	RDF-140-20	125	122	115	106	99	94	85	77	69	64	59
	RDF 180-15	166	163	153	141	133	126	113	102	92	85	79
	RDF-220-15	208	204	192	177	166	157	142	128	115	106	98
	RDF-290-15	260	255	240	221	207	197	177	160	144	133	123
	RDF-380-15	375	368	335	319	299	284	255	231	208	192	177
	RDF-450-15	416	408	383	354	332	315	284	256	231	213	197
	RDF-550-12	468	460	431	399	373	355	319	289	260	240	222
	RDF-250-24	239	235	220	203	190	181	163	147	133	122	113
	RDF-350-24	322	316	297	274	257	244	220	199	179	165	153
	RDF-500-24	468	460	431	399	373	355	319	289	260	240	222
	RDF-750-24	677	664	623	576	539	513	461	417	376	346	321
	RDF-950-24	885	868	815	753	705	671	603	545	492	453	419
	RDF-750-9.5	781	715	671	620	581	552	497	449	405	373	345
	RDF-1250-24	1145	1124	1055	975	913	869	781	706	637	586	543
	RDF-1400-24	1354	1324	1247	1152	1079	1026	923	835	753	693	642
	RDF-850-10	-	-	-	664	622	592	532	481	434	400	370
	RDF-1100-10	-	-	-	842	788	750	675	610	550	506	469
	RDF-1400-7	-	-	-	1063	1038	987	888	770	724	666	617

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

In this case higher torque applies after 1-2 turns.
A 20% loss of friction 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, doors higher than normal or in the case of particular
entry situations that could require other force ratios or cause additional losses
of friction (e.g. doors that are wider than the height), for example.

RDF



Indication of station choice to combine with the RDF gearmotors

Control unit	RDF series gearmotors				
	RDF-140-20 RDF-220-15 RDF-290-15	RDF-380-15 RDF-450-15 RDF-550-12	RDF-750-10 RDF-1000-10 RDF-1400-7	RDF-250-24 fino a RDF-750-24	RDF-950-24 RDF-1250-24 RDF-1400-24
UST2*	•	•			
UST1-5,5 kW					•
UST1-2,2 kW	•	•	•	•	
UST1K-5,5 kW					•
UST1K-2,2 kW	•	•	•	•	
UST1K-1,1 kW	•				

Nice RDF series gearmotors for rolling shutters



Electromechanical gearmotor for rolling shutters up to 750 kg, with integrated brake and mechanical or electronic limit switches, chain-operated emergency (KE2 series) or handle-operated emergency (KU series) with integrated parachute device.

Simple installation:

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

Complete Nice gearmotor-cable-station kits are directly wired in production and allow installation time to be further reduced.

Compact and efficient:

torque up to 550 Nm.
speed up to 12 rpm.

Unbeatable safety:

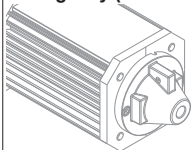
due to the antifall safety system and the chance to connect safety devices such as optical or resistive sensitive edges (8.2 kΩ). Gearmotors compliant with the most recent European standards and directives in terms of safety and technology.

Practical:

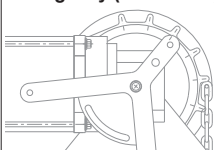
Release available in 2 versions

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

Handle-operated emergency (KU series)



Chain-operated emergency (KE2 series)



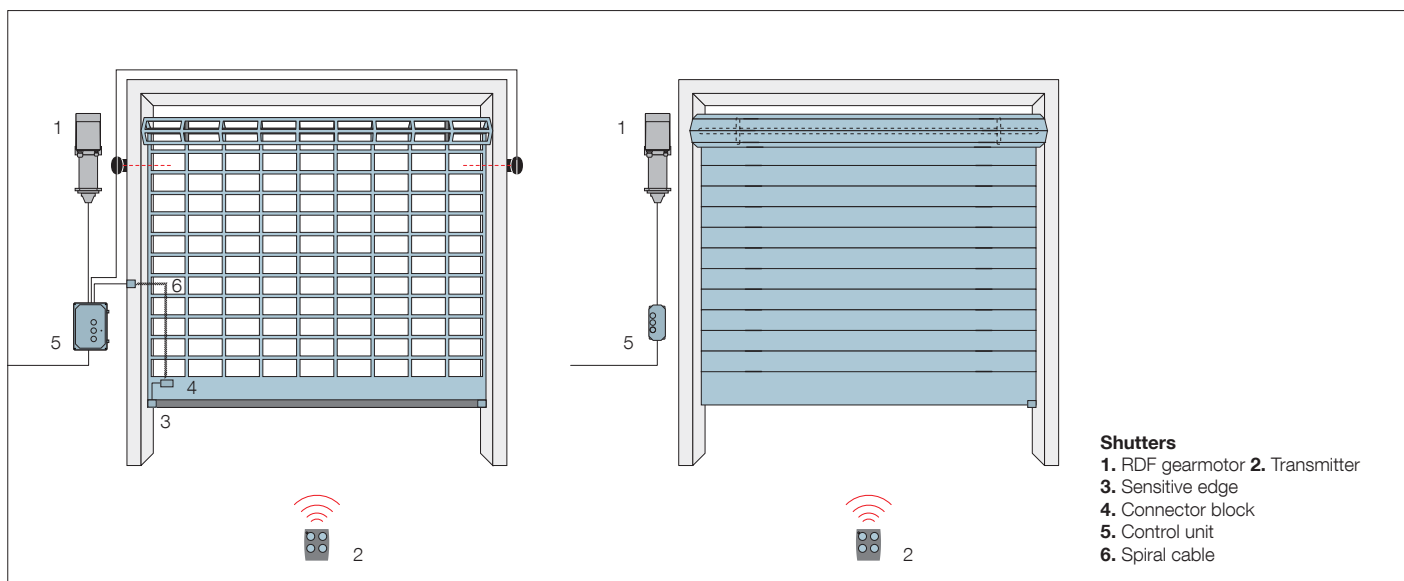
Complete preassembled kits

Code	Description
NDCK0375	Gearmotor with electronic limit switch and handle release, UST1 station with K2 and K4 modules and EEC plug, 5 m cable
NDCK0206	Gearmotor gearmotor with mechanical limit switch and handle release, UST1 station with K1 module and EEC plug, 5 m cable

Gearmotors

Code	Description
NDCM0079	RDF 220-15 gearmotor with mechanical limit switch and handle release, preassembled 7 m cable
NDCM0080	RDF 290-15 gearmotor with mechanical limit switch and handle release, preassembled 7 m cable
NDCM0110	RDF 380-15 gearmotor with mechanical limit switch and 5 m chain release, preassembled 7 m cable
NDCM0131	RDF 450-15 gearmotor with mechanical limit switch and handle release, preassembled 7 m cable
NDCM0149	RDF 550-12 gearmotor with mechanical limit switch and handle release, preassembled 7 m cable
NCDM0108	RDF 750-9.5 gearmotor with mechanical limit switch and 5 m chain release, preassembled 7 m cable
NDCM0033	RDF 1100-10 gearmotor with electronic limit switch and 5 m chain release, preassembled 9 m cable

Available on request: special accessories for fastening, shafts and discs to be welded.



Technical data

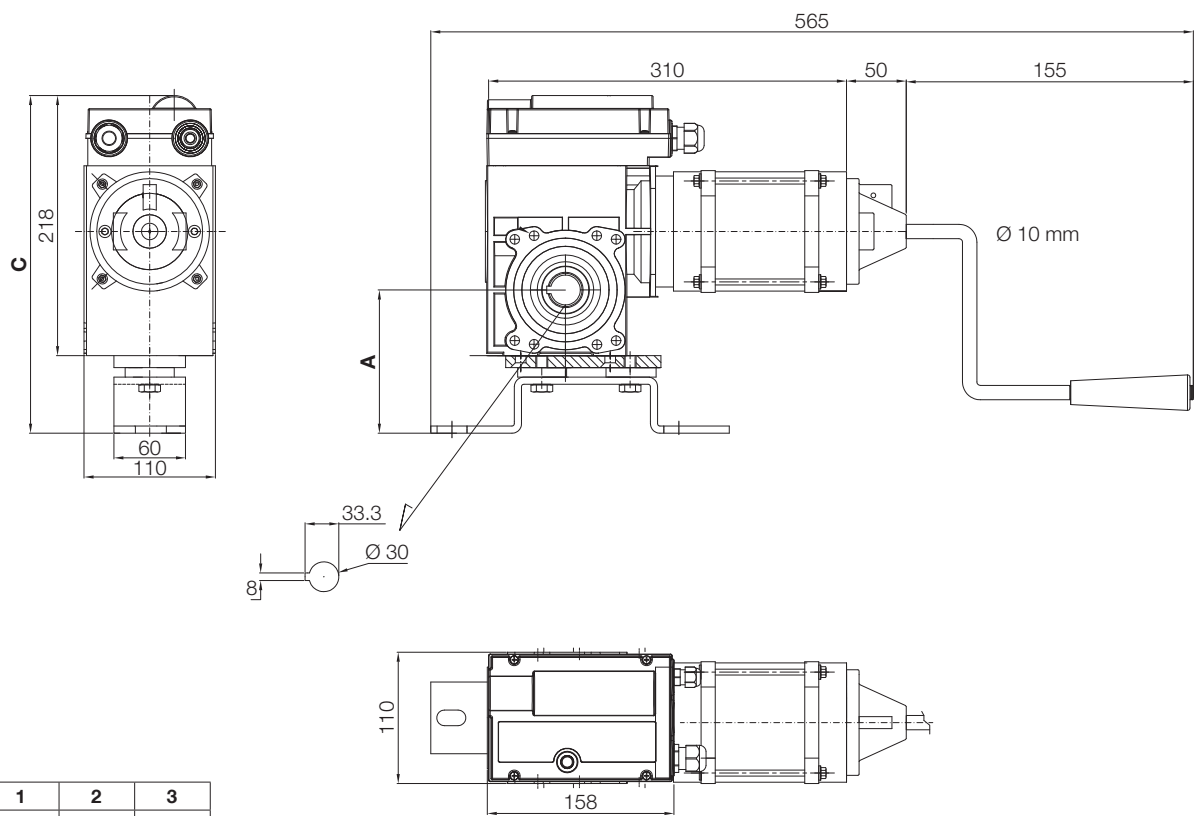
Model	RDF-	140-20	220-15	290-15	380-15	450-15	550-12	750-9,5
Shaft Ø (mm)		30			40			
Max. torque (Nm)		140	220	290	380	450	550	750
Rated torque (Nm)		120	200	250	360	400	450	700
Output rpm		20	15	15	15	15	12	9,5
Motor power (kW)		0,55	1,1	1,1	1,5	1,5	1,5	1,5
Limit switch rpm		15	10-20	10-20	10-20	10-20	10	40
Working voltage (V/Hz)		3x230 V / 3x400 V 50 Hz						
Duty Cycle		S 3 - 60%						
Connection cable (no. x mm²)		5 x 1,5						
Operating temperature (°C)		-5 ÷ +40						
Noise dB(A)		<70						
Protection rating (IP)		IP 54						
Weight (kg)		12,4	22	24	28,9	27,7	27,7	35

Model	RDF-	850-10	1100-10	1400-7	250-24	350-24	500-24	750-24	950-24	1250-24	1400-24
Shaft Ø (mm)		55			40			55			
Max. torque (Nm)		850	1100	1400	250	350	500	750	950	1250	1400
Rated torque (Nm)		700	950	1250	230	310	450	650	850	1100	1250
Output rpm		10	10	7	24	24	24	24	24	24	24
Motor power (kW)		2,2	2,2	2,2	1,1	1,5	2,2	2,2	3	4	5,5
Limit switch rpm		10-40	10-40	10-40	10-40	10-40	10-40	10-40	10-40	10-40	10-40
Working voltage (V/Hz)		3x230 V / 3x400 V 50 Hz									
Duty Cycle		S 3 - 60%									
Connection cable (no. x mm²)		5 x 1,5									
Operating temperature (°C)		-5 ÷ +40									
Noise dB(A)		<70									
Protection rating (IP)		IP 54									
Weight (kg)		51,7	51,9	58	24,1	29,2	32,7	51,9	61	63	65

Gearmotors with integrated parachute device, independent of speed and position.

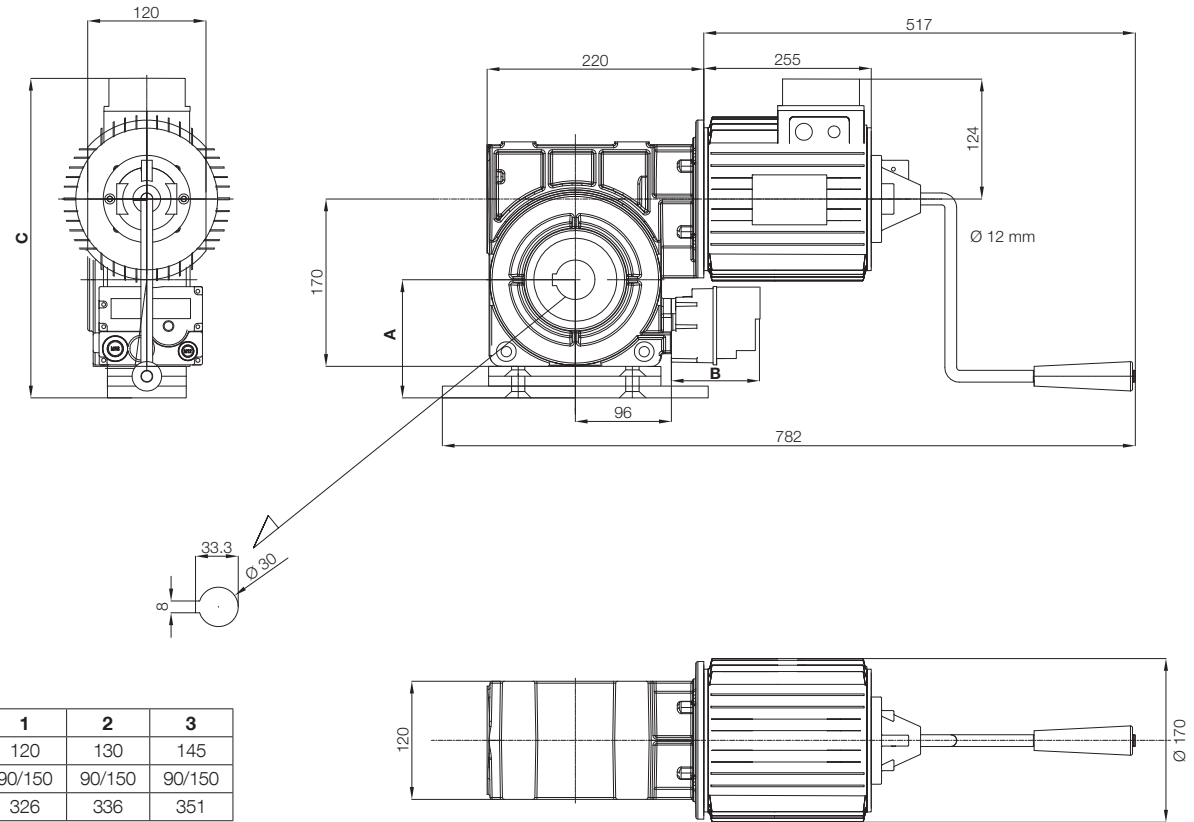
Nice RDF series technical drawings for rolling shutters

RDF-140-20-KU



Dimension	1	2	3
A	120	130	145
C	284	294	309

RDF-220-15-KU

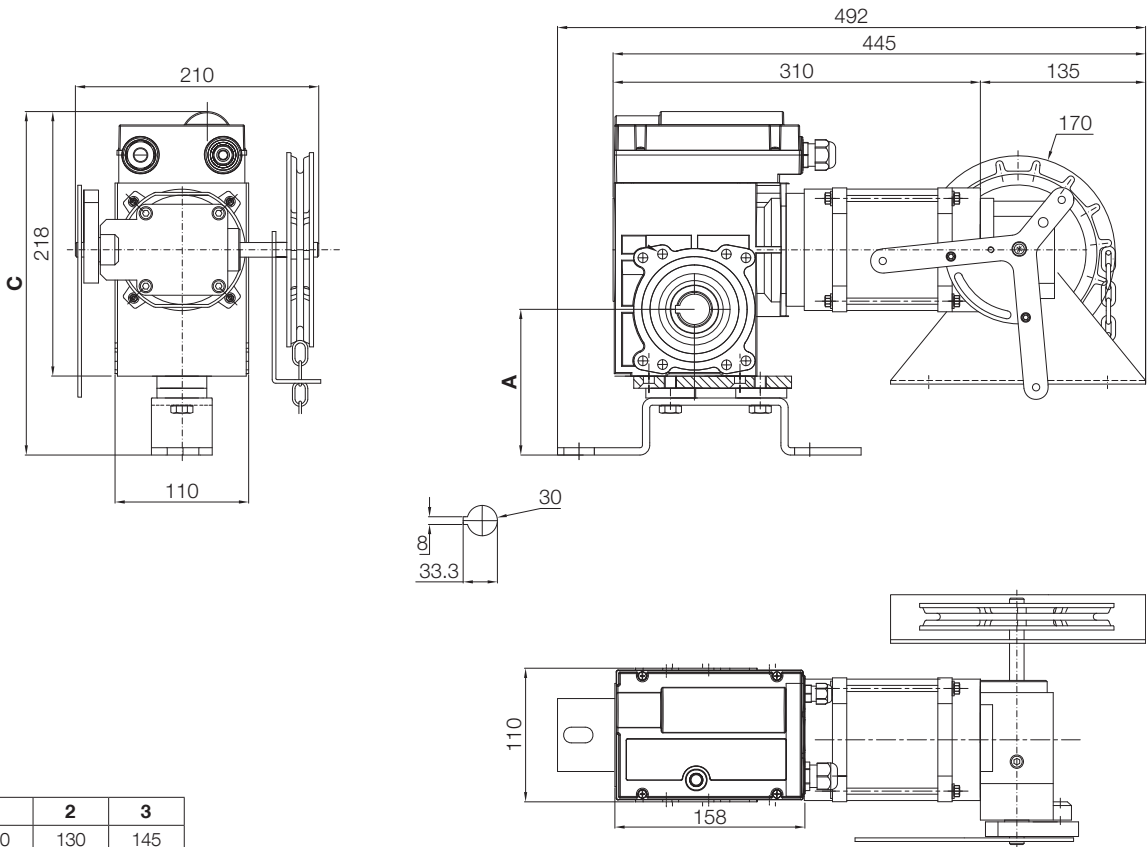


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	326	336	351

B = 90 electronic limit switches
B = 150 mechanical limit switches

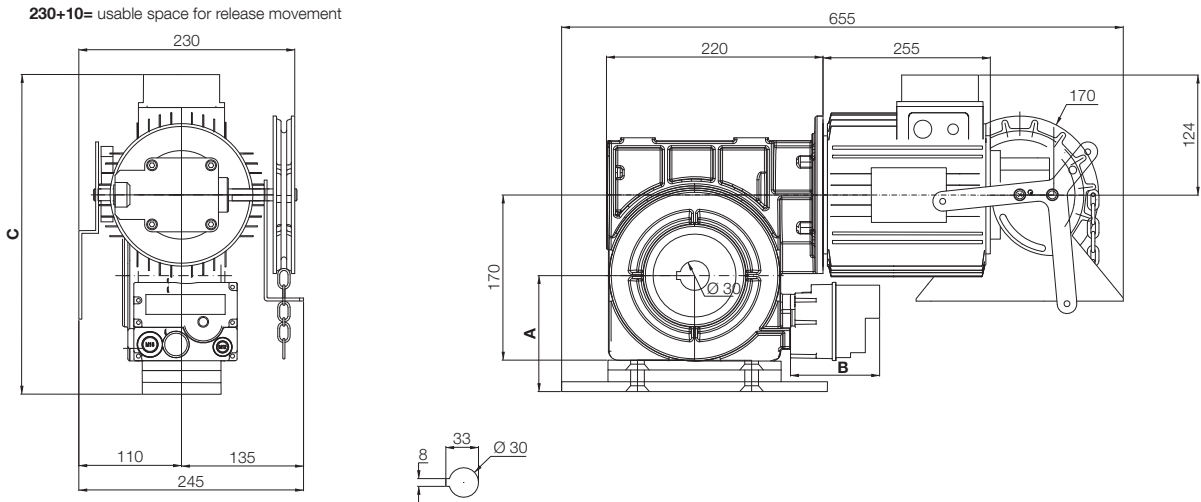
Key
Dimension A: shaft centre - fixing bracket lower edge distance | Dimension B: limit switch housing length | Dimension C: gearmotor construction height | 1, 2, 3: possibilities available

RDF-140-20-KE2



Dimension	1	2	3
A	120	130	145
C	284	294	309

RDF-220-15-KE2

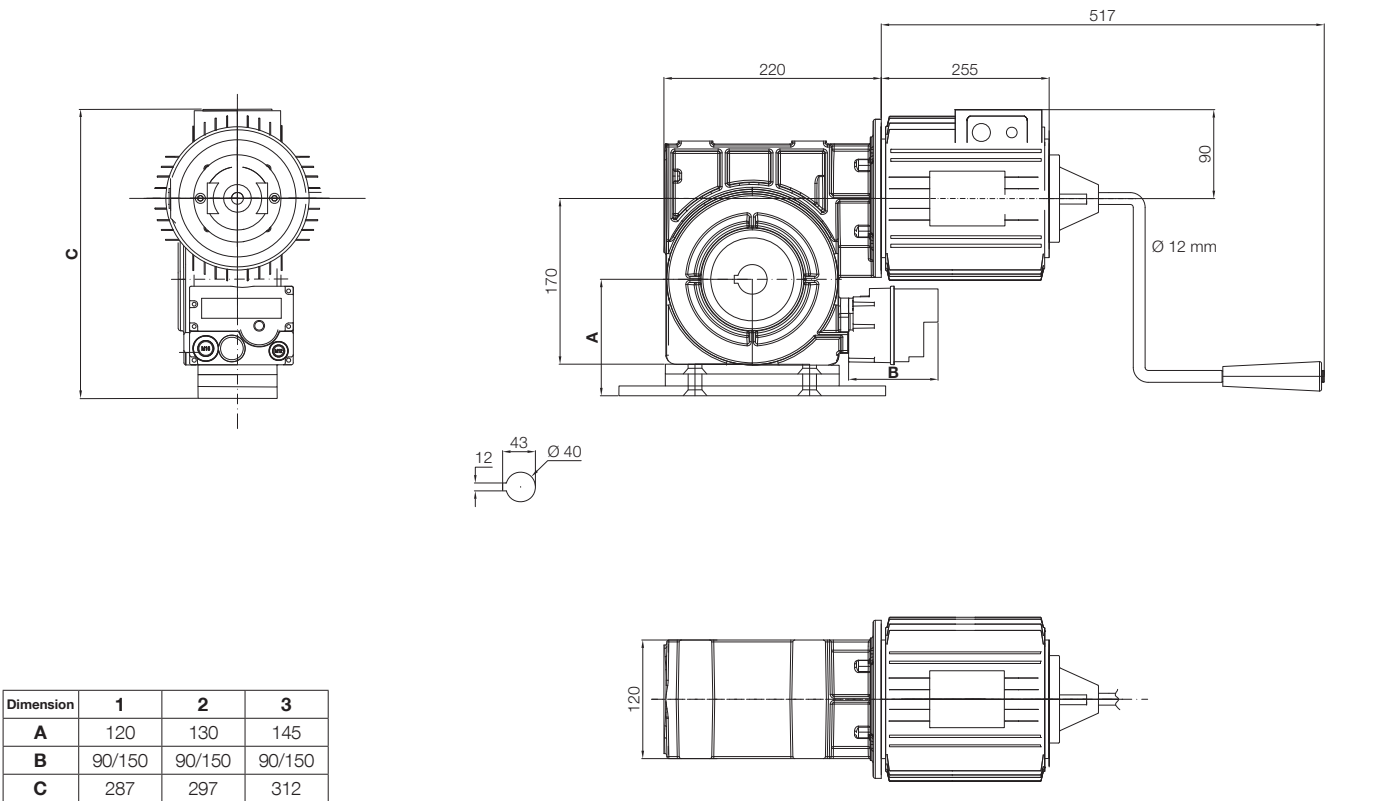


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	326	336	351

B = 90 electronic limit switches
B = 150 mechanical limit switches

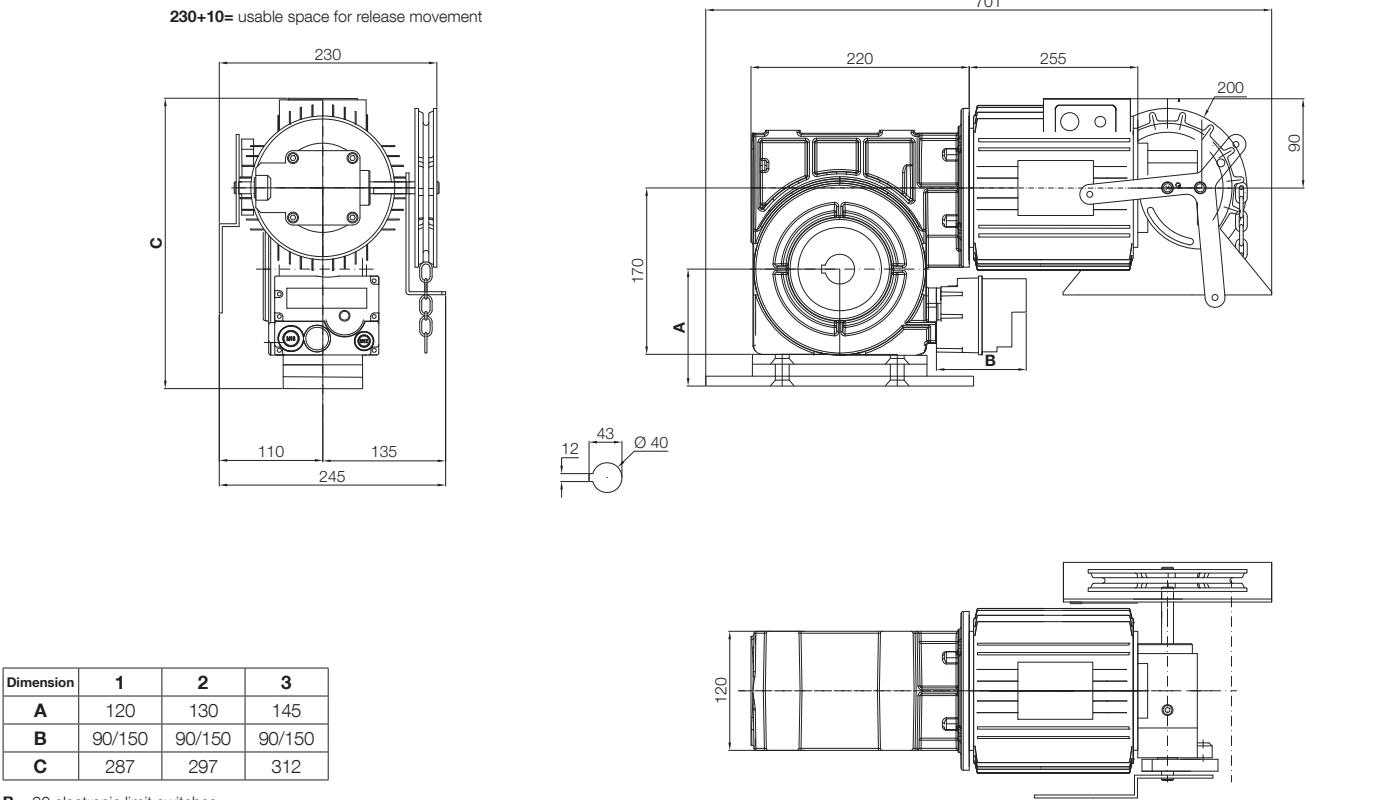
Nice RDF series technical drawings for rolling shutters

RDF-380/450-15-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

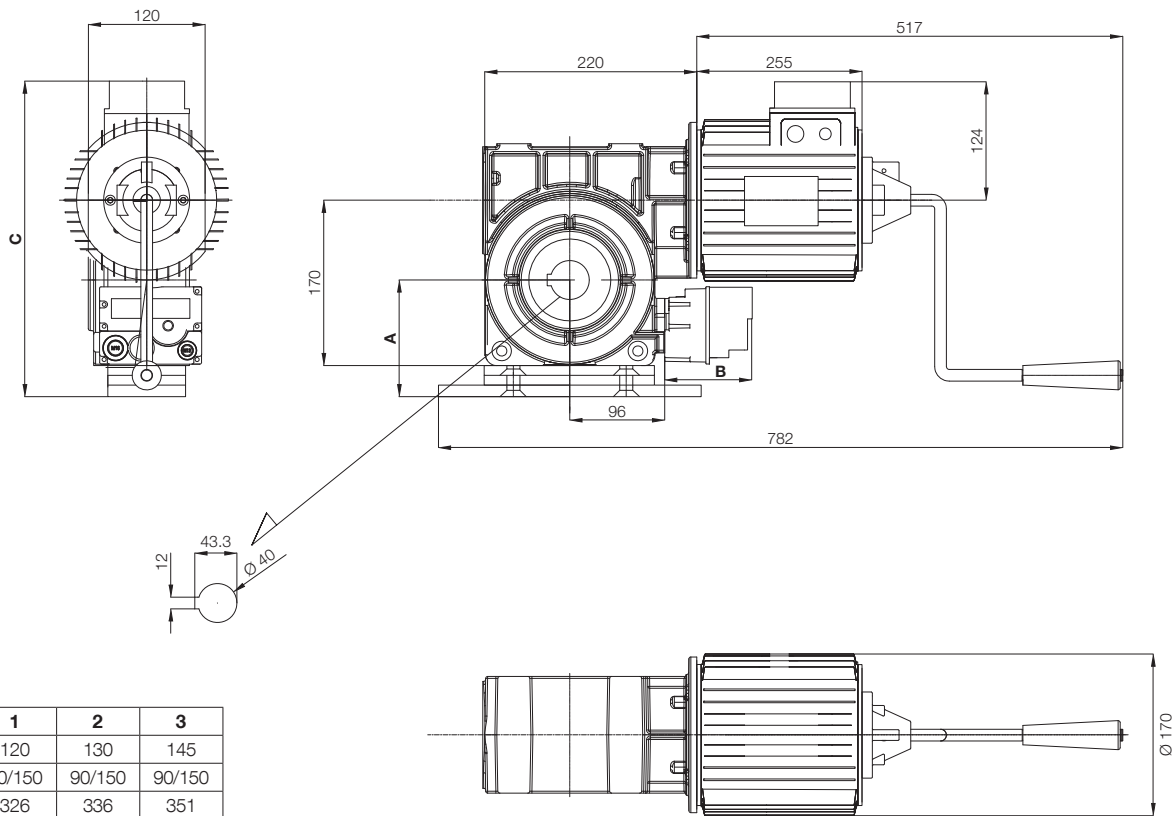
RDF-380/450-15-KE2



B = 90 electronic limit switches
B = 150 mechanical limit switches

Key
Dimension A: shaft centre - fixing bracket lower edge distance | Dimension B: limit switch housing length | Dimension C: gearmotor construction height | 1, 2, 3: possibilities available

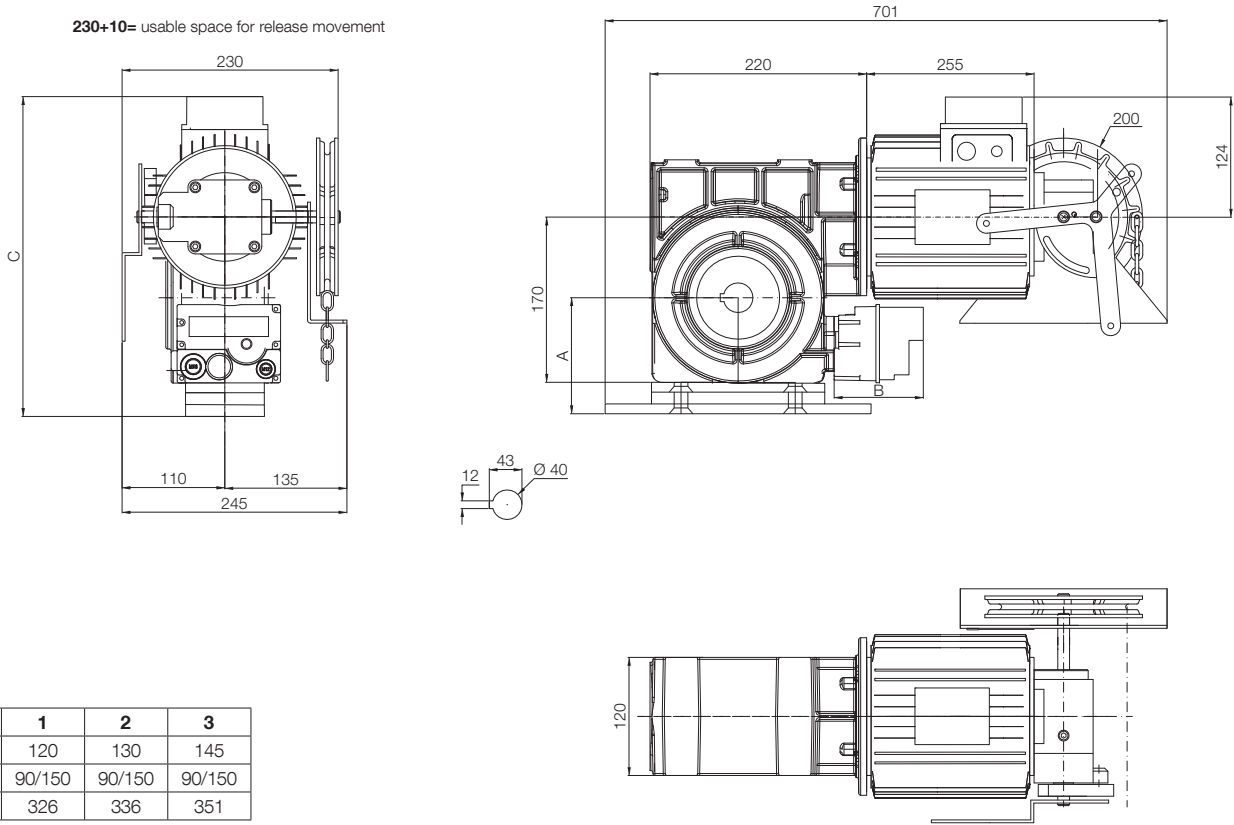
RDF-550-12-KU



Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	326	336	351

B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-550-12-KE2

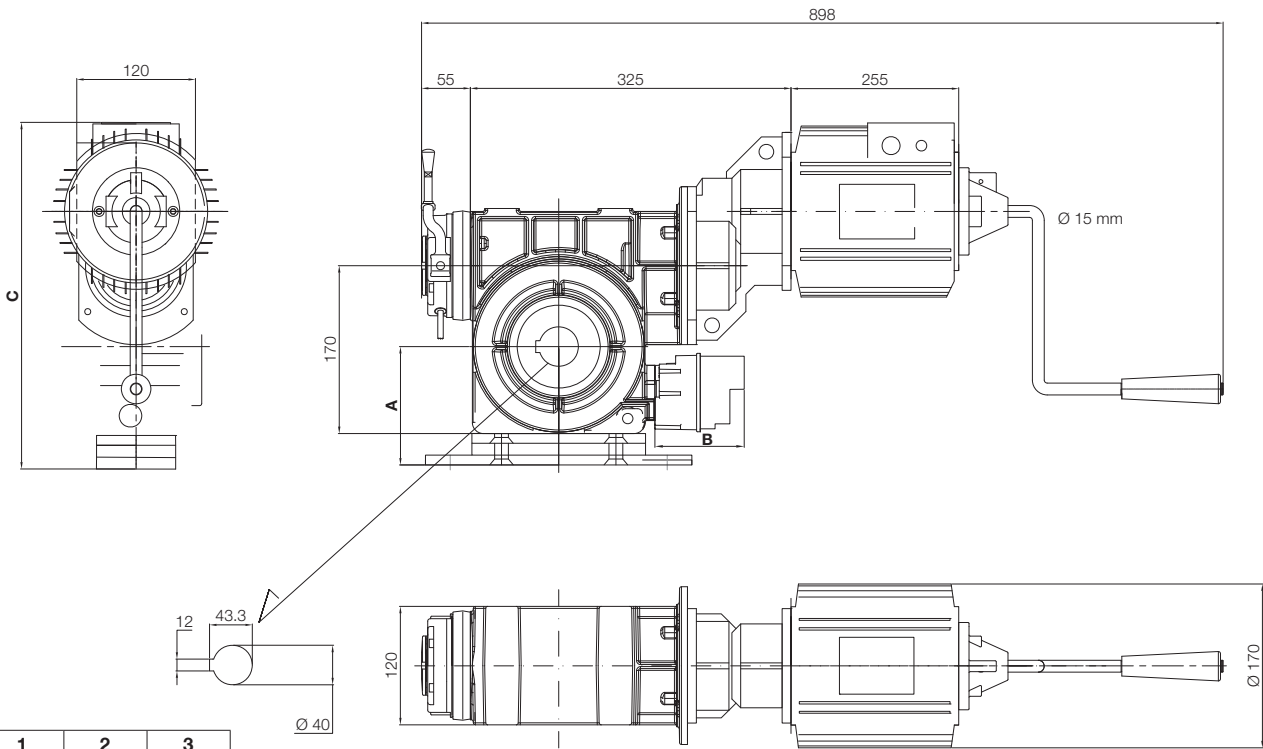


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	326	336	351

B = 90 electronic limit switches
B = 150 mechanical limit switches

Nice RDF series technical drawings for rolling shutters

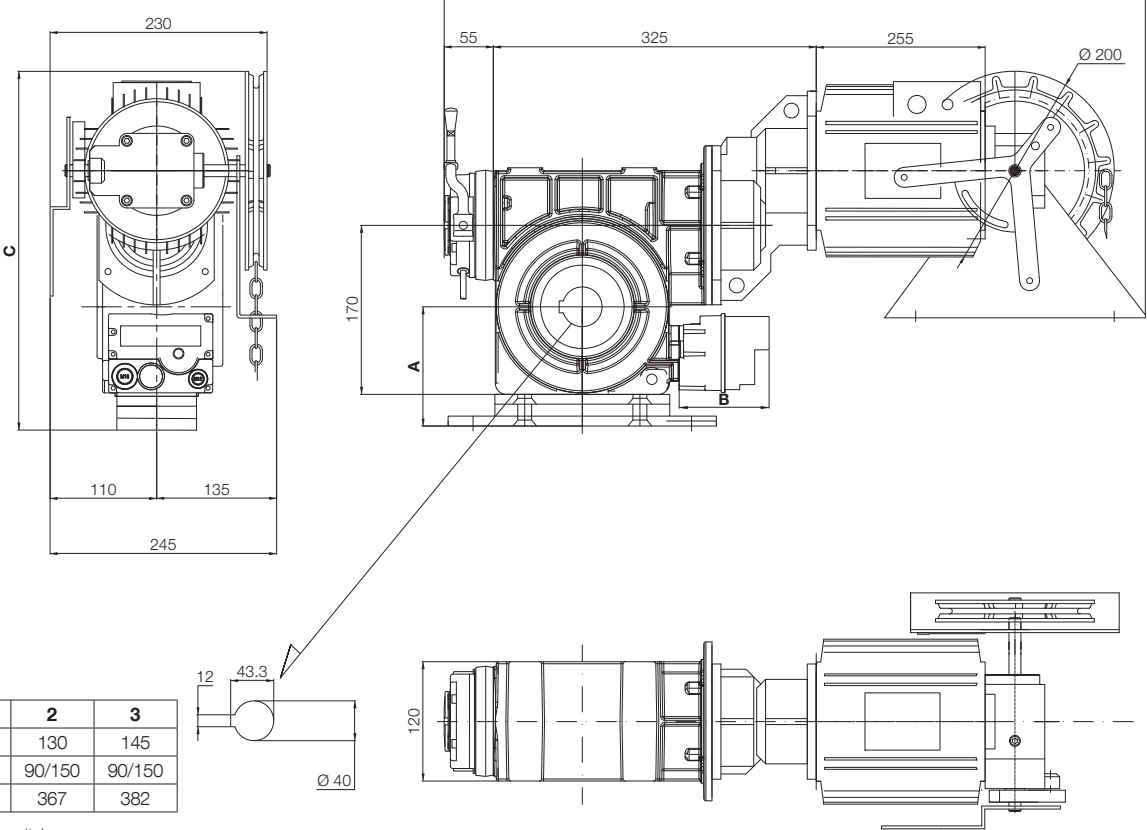
RDF-750-9.5-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-750-9.5-KE2

230+10= usable space for release movement

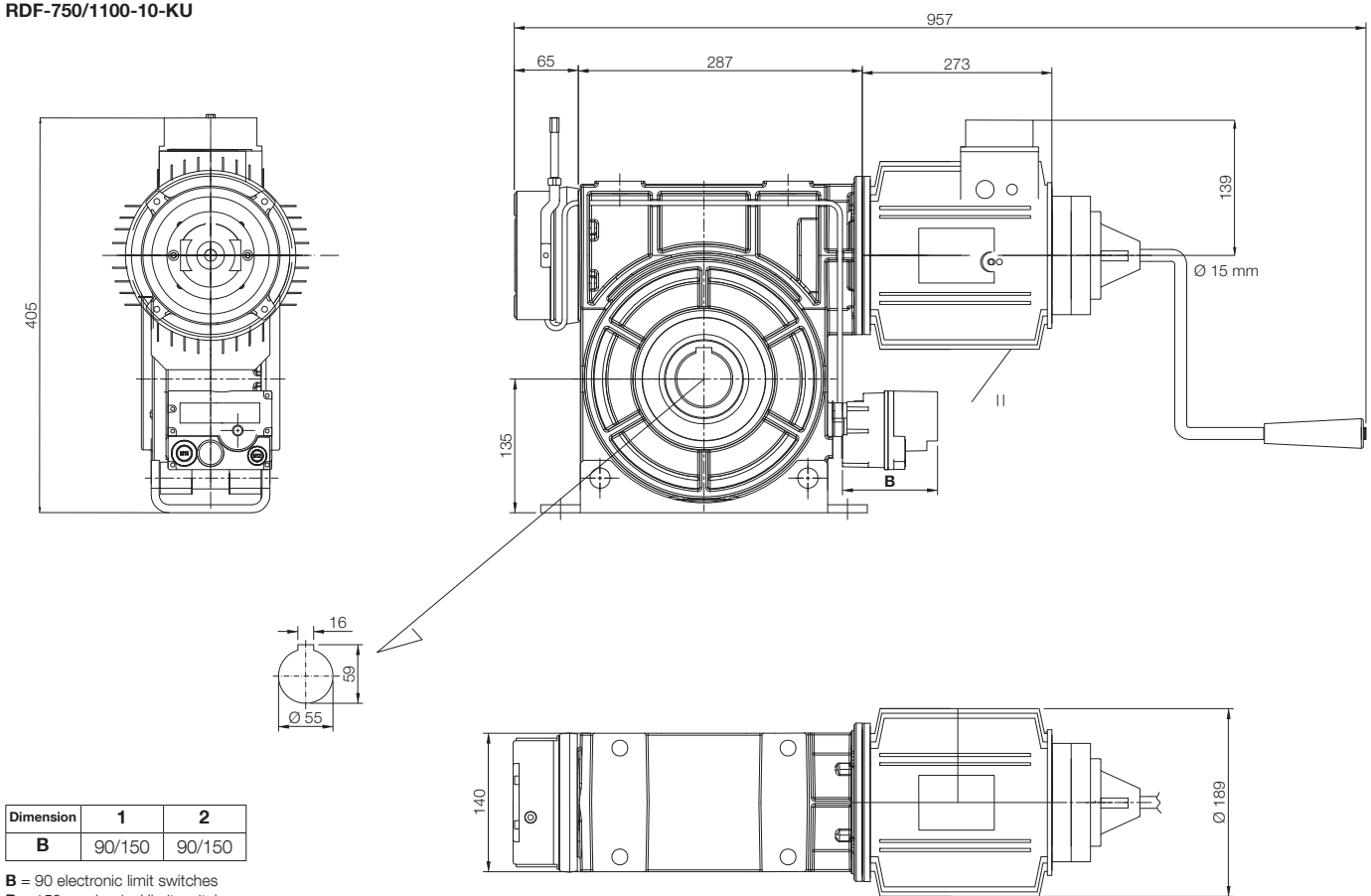


B = 90 electronic limit switches
B = 150 mechanical limit switches

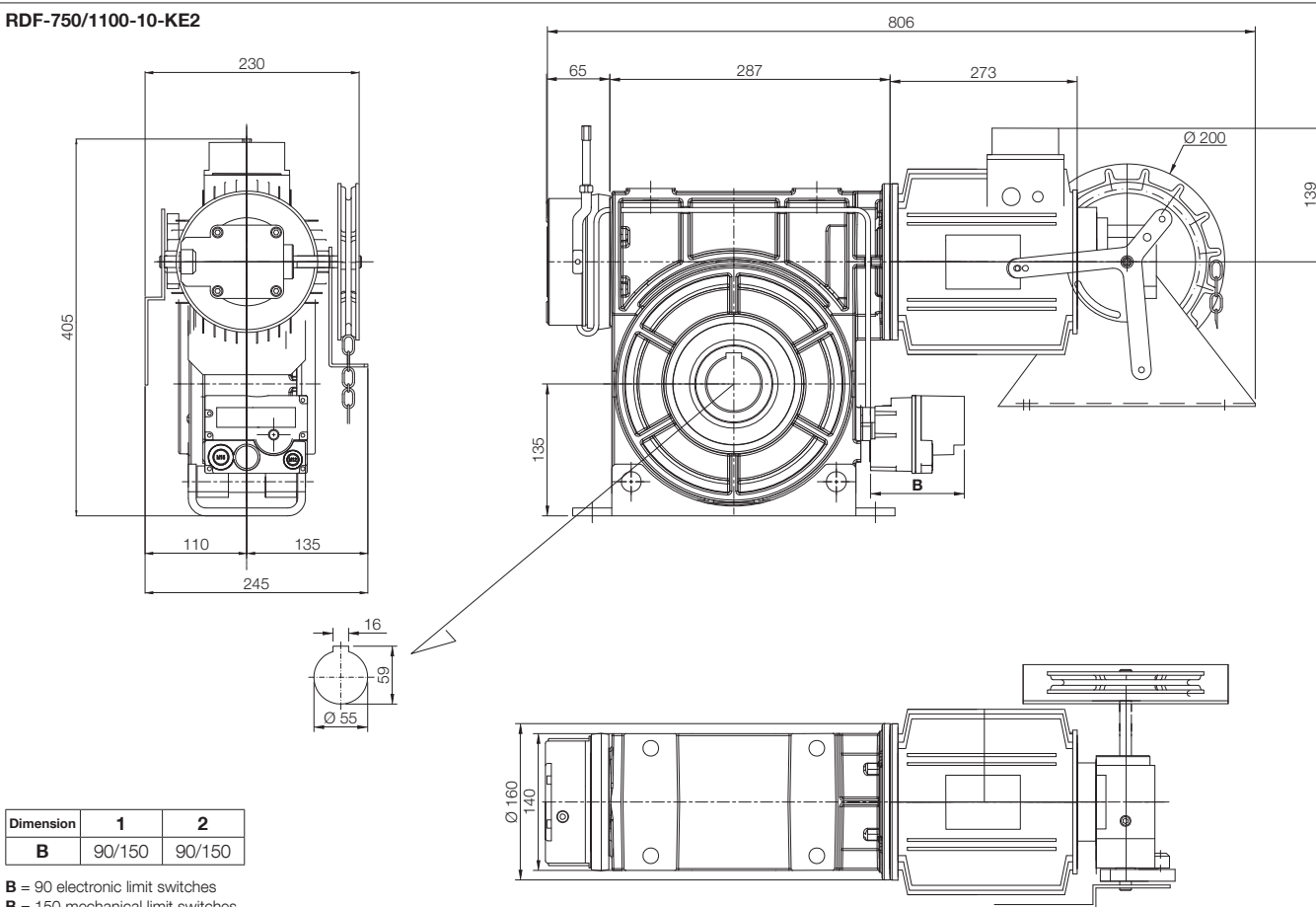
Key

Dimension A: shaft centre - fixing bracket lower edge distance | **Dimension B:** limit switch housing length | **Dimension C:** gearmotor construction height | **1, 2, 3:** possibilities available

RDF-750/1100-10-KU

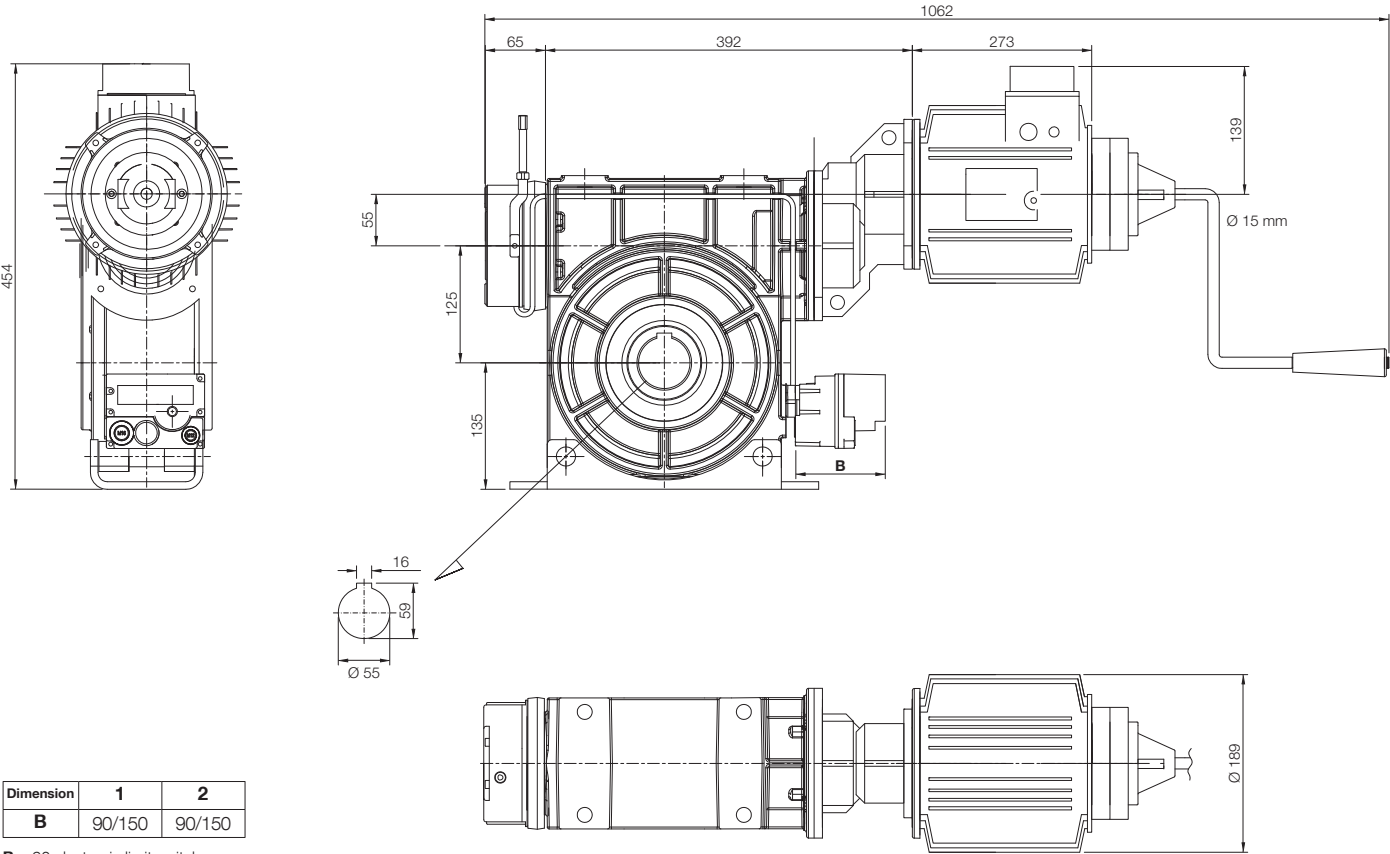


RDF-750/1100-10-KE2



Nice RDF series technical drawings for rolling shutters

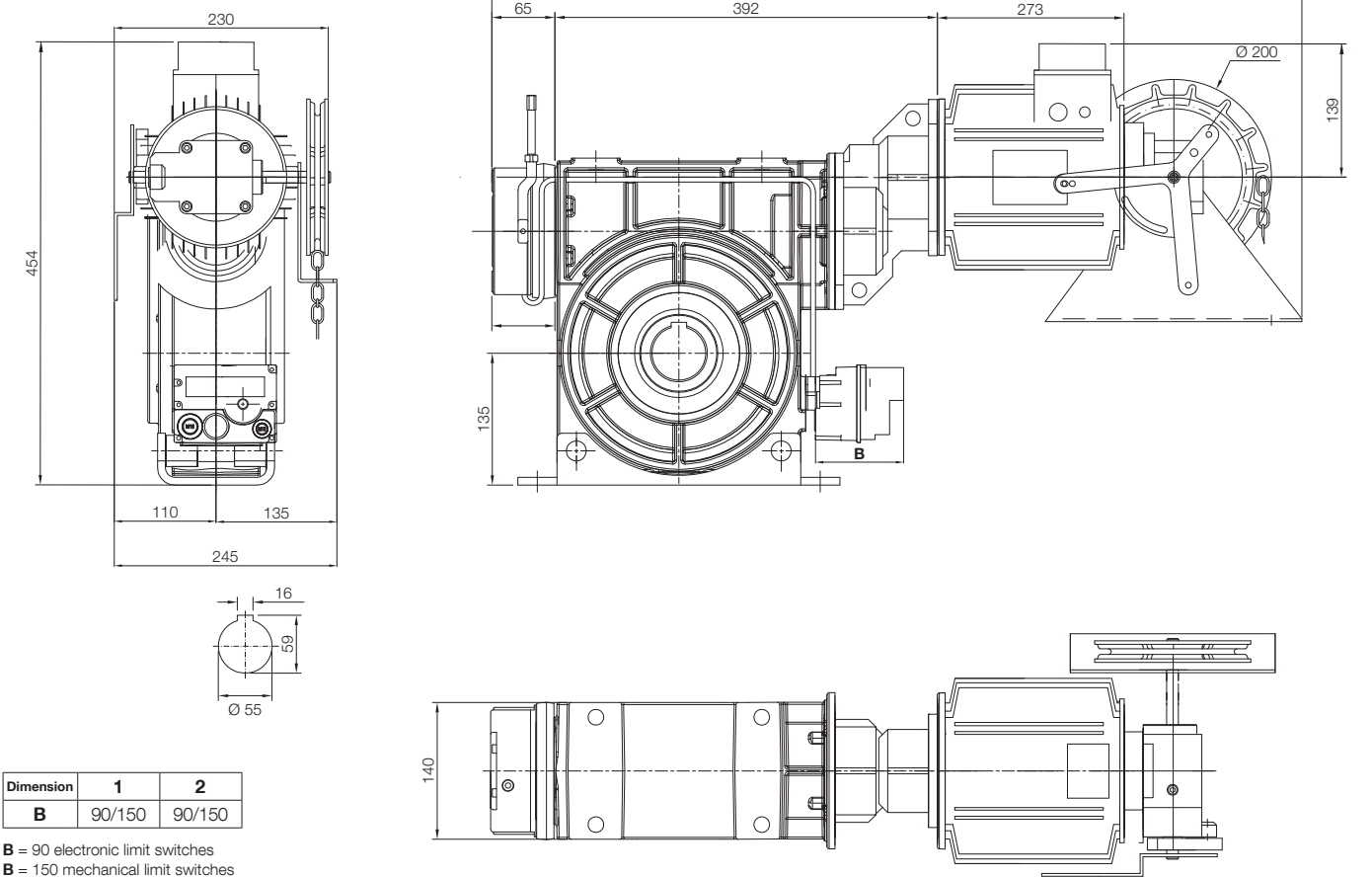
RDF-1400-7-KU



Dimension	1	2
B	90/150	90/150

B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-1400-7-KE2

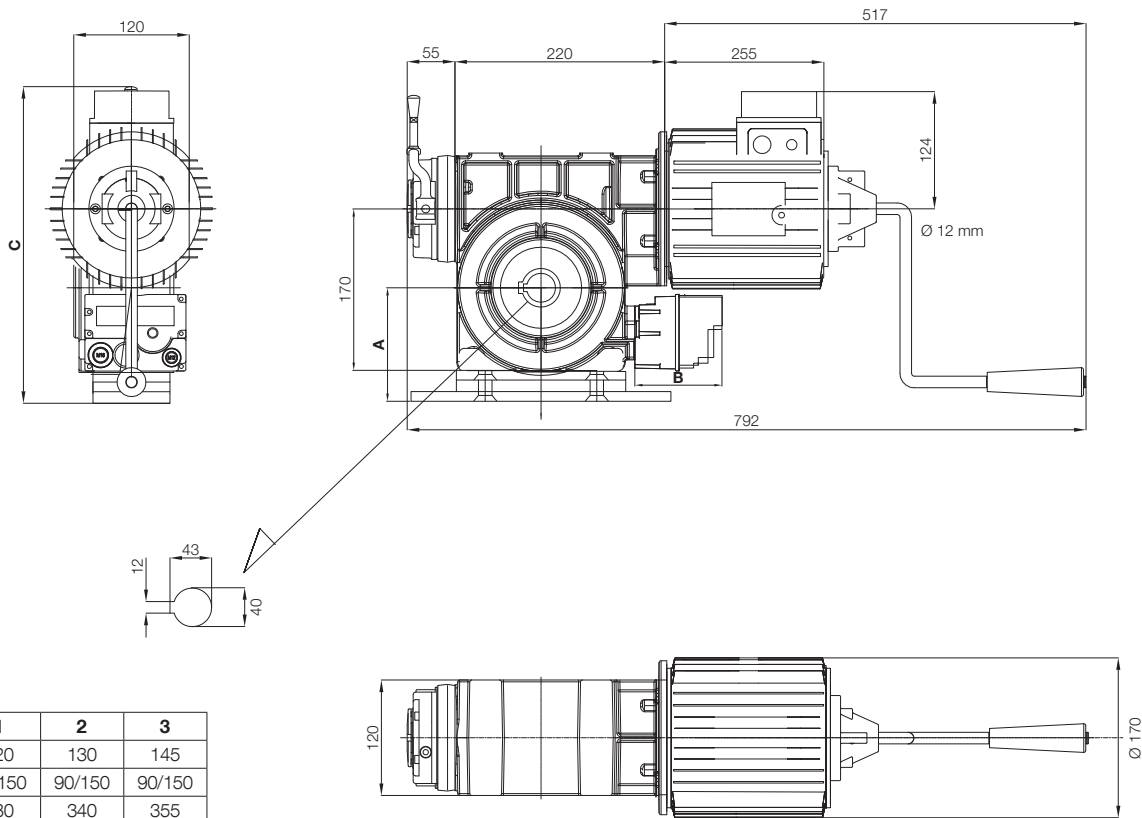


Dimension	1	2
B	90/150	90/150

B = 90 electronic limit switches
B = 150 mechanical limit switches

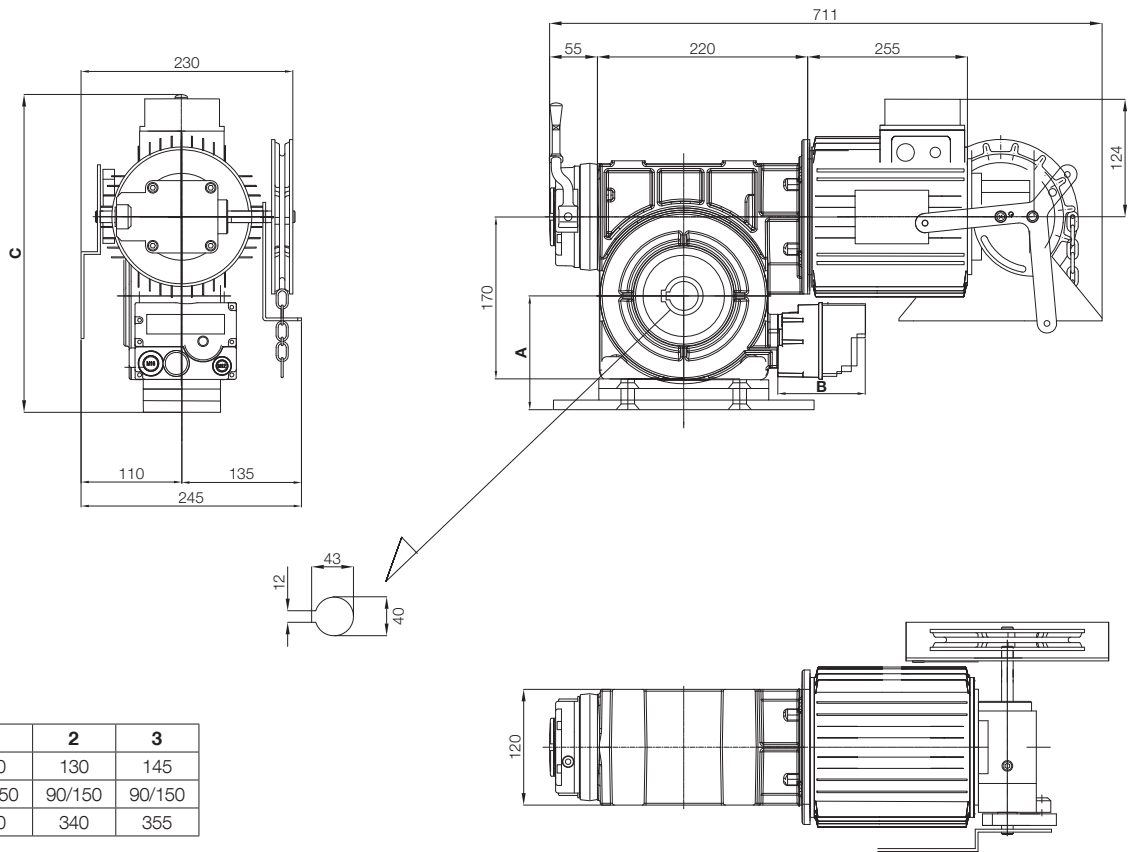
Key
Dimension A: shaft centre - fixing bracket lower edge distance | **Dimension B:** limit switch housing length | **Dimension C:** gearmotor construction height | **1, 2, 3:** possibilities available

RDF-250-24-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

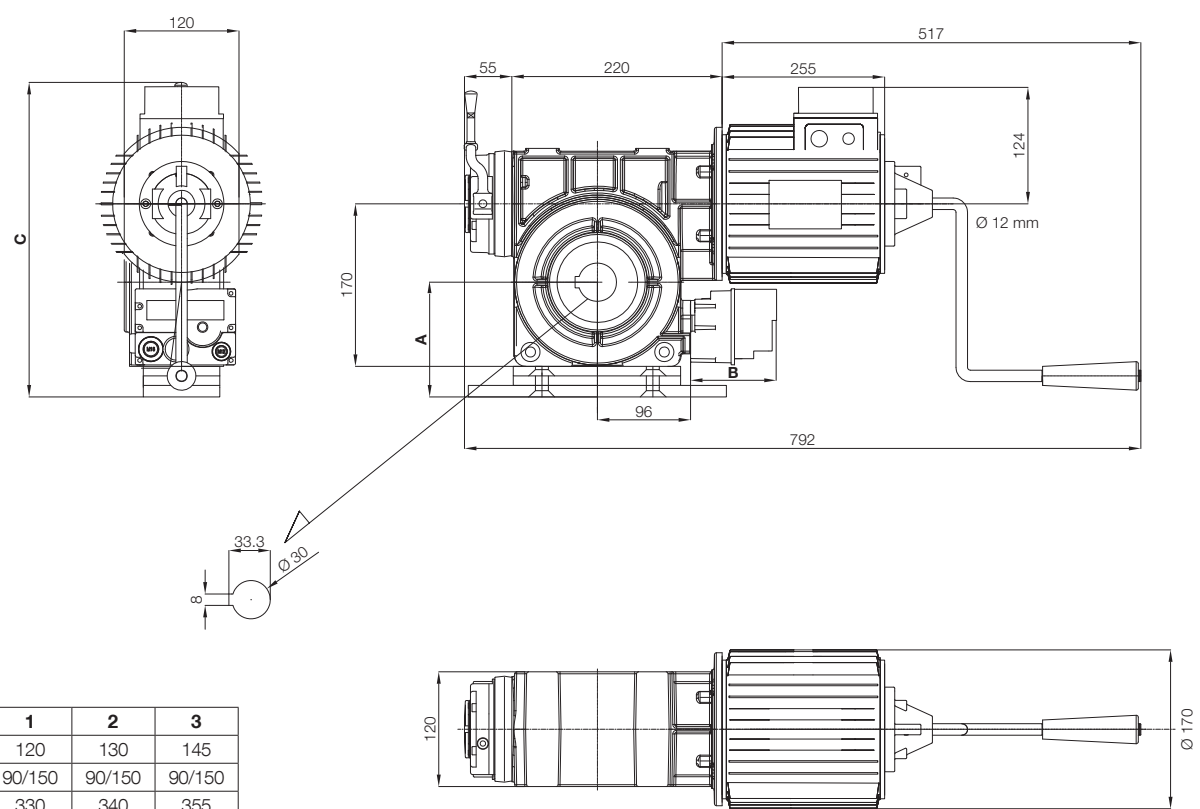
RDF-250-24-KE2



B = 90 electronic limit switches
B = 150 mechanical limit switches

Nice RDF series technical drawings for rolling shutters

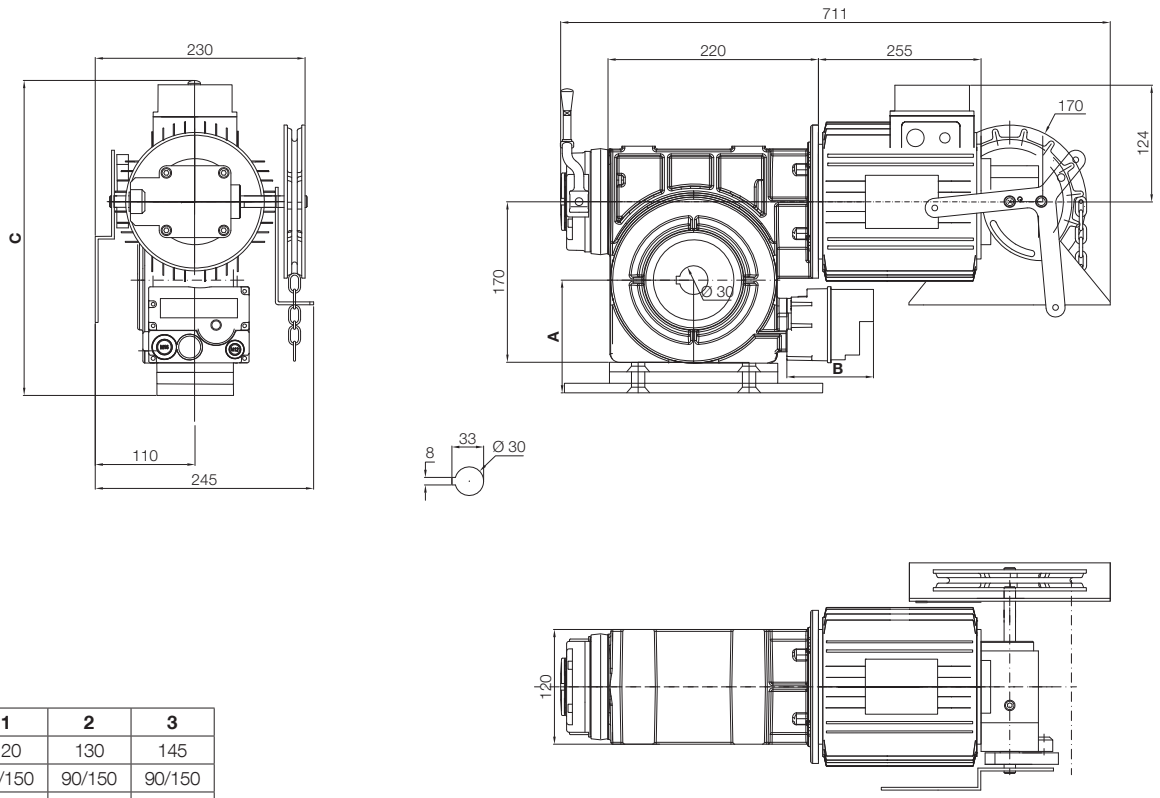
RDF-350-24-KU



Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-350-24-KE2

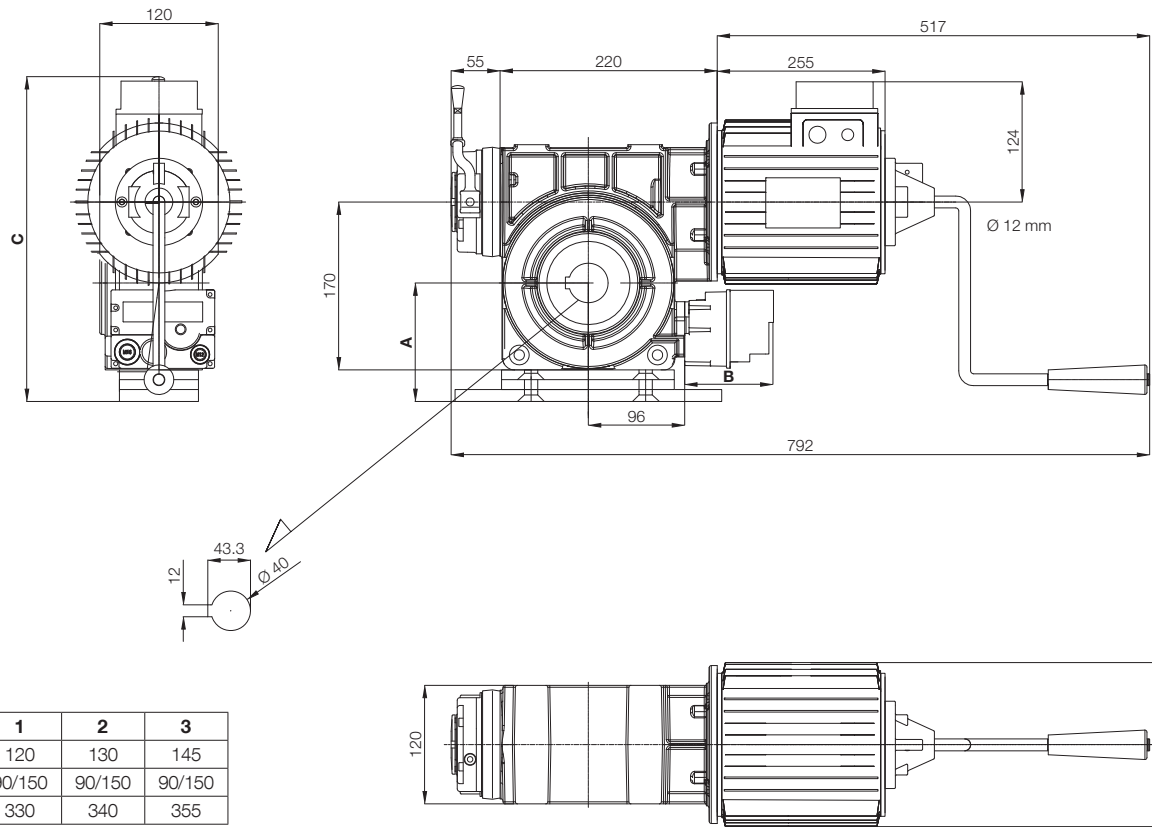


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

B = 90 electronic limit switches
B = 150 mechanical limit switches

Key
Dimension A: shaft centre - fixing bracket lower edge distance | Dimension B: limit switch housing length | Dimension C: gearmotor construction height | 1, 2, 3: possibilities available

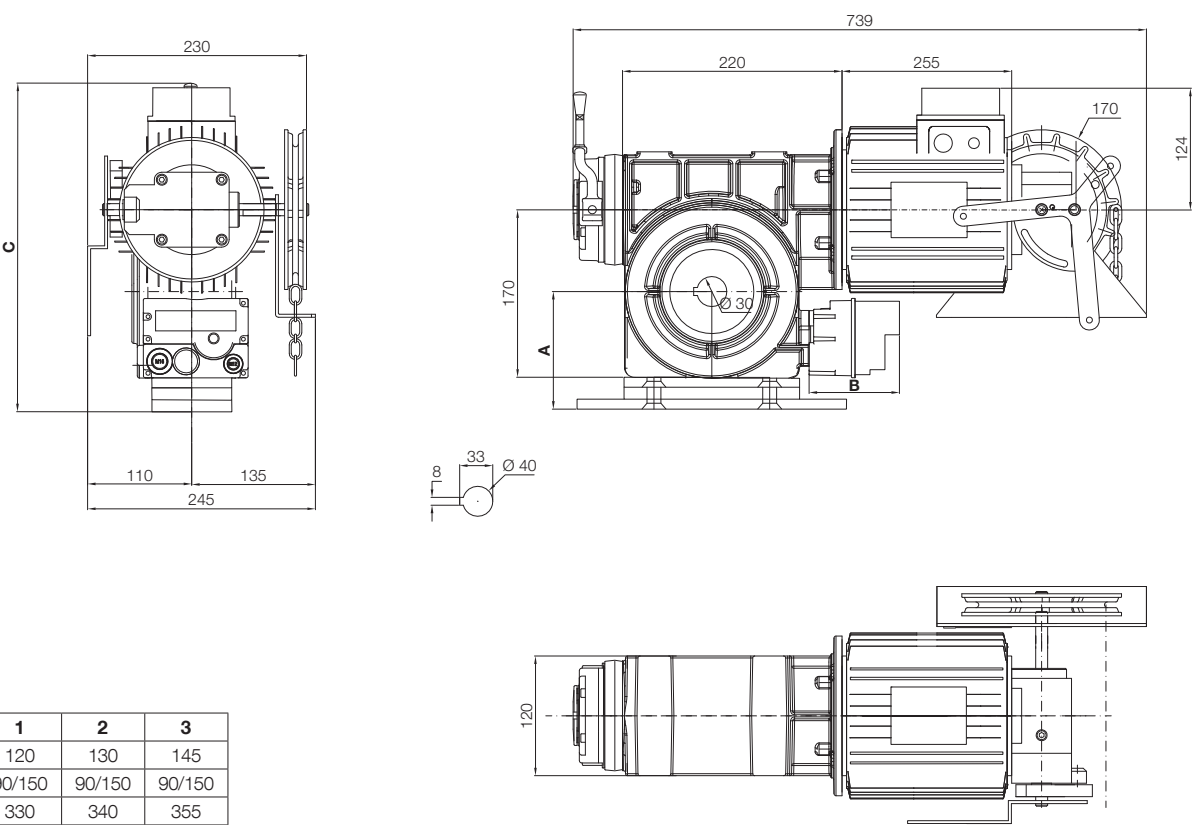
RDF-500-24-KU



Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-500-24-KE2

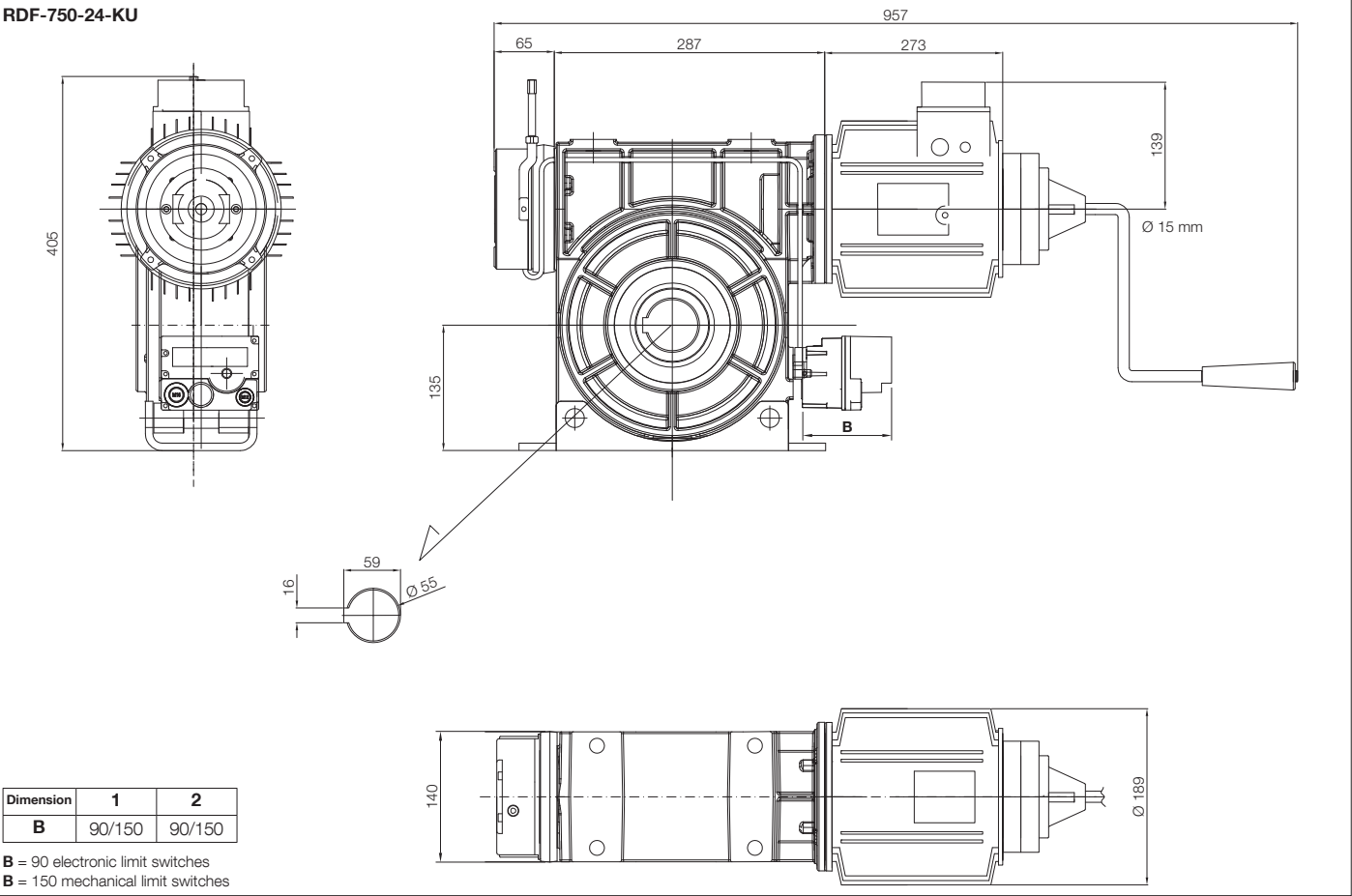


Dimension	1	2	3
A	120	130	145
B	90/150	90/150	90/150
C	330	340	355

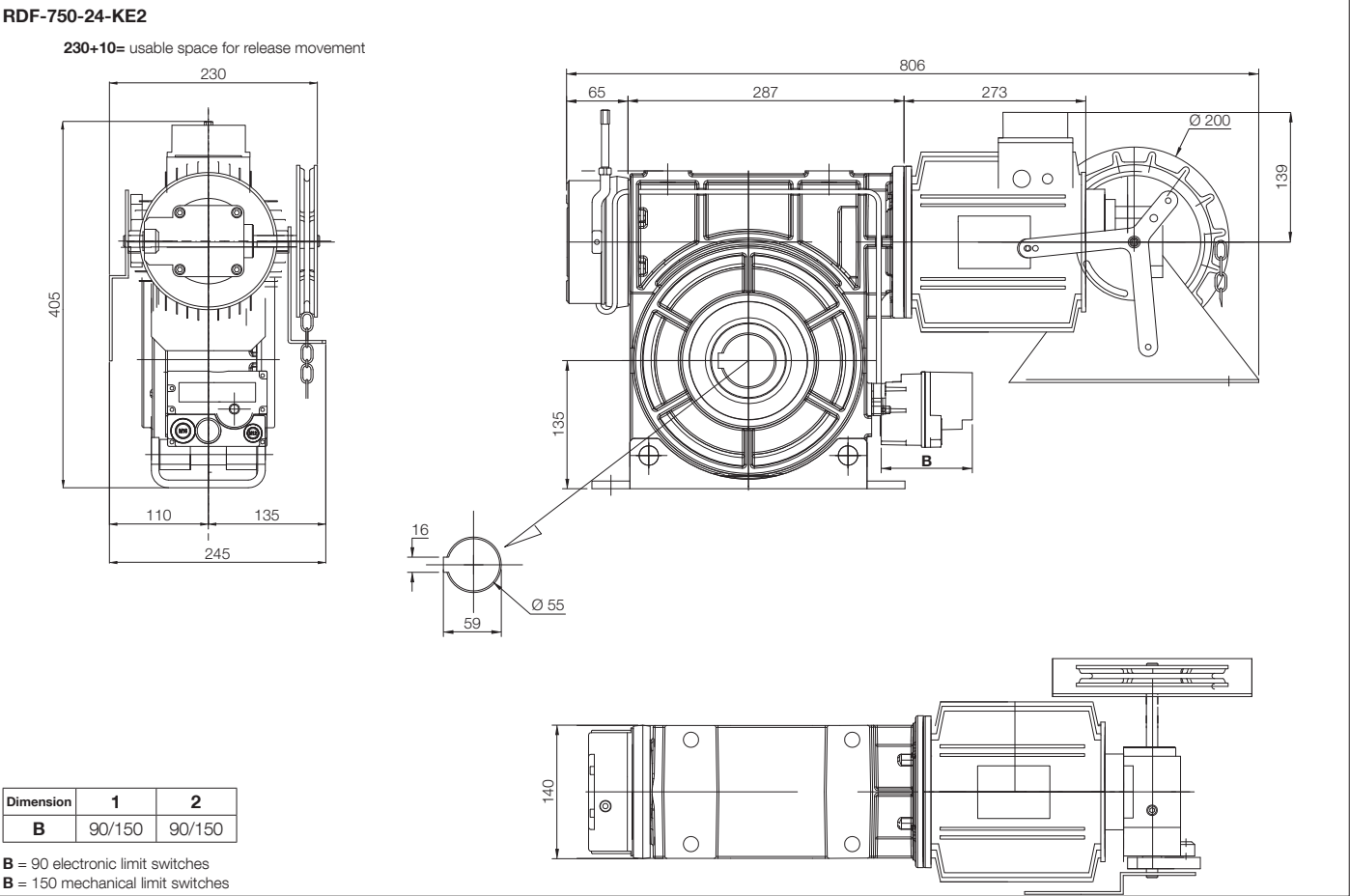
B = 90 electronic limit switches
B = 150 mechanical limit switches

Nice RDF series technical drawings for rolling shutters

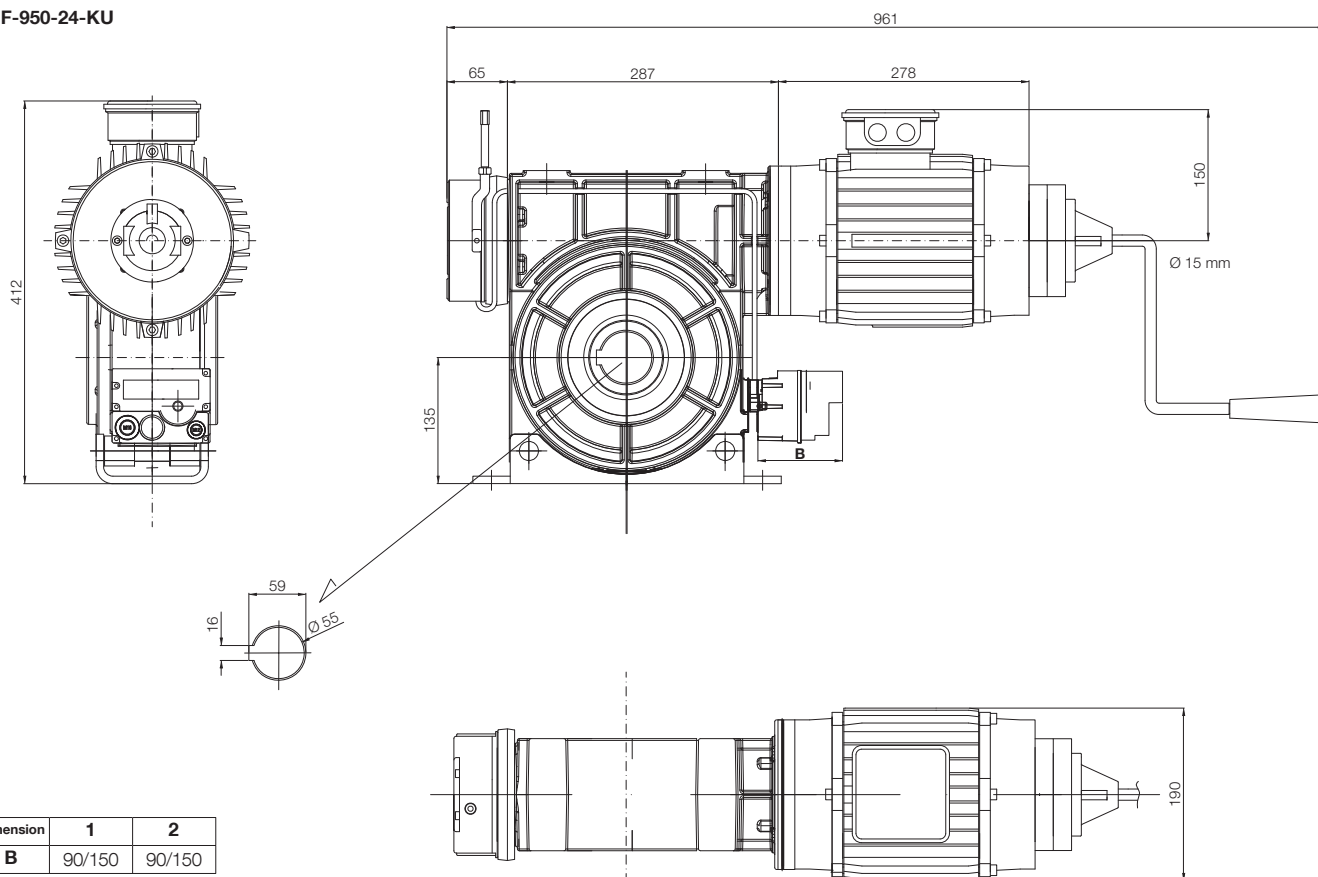
RDF-750-24-KU



RDF-750-24-KE2



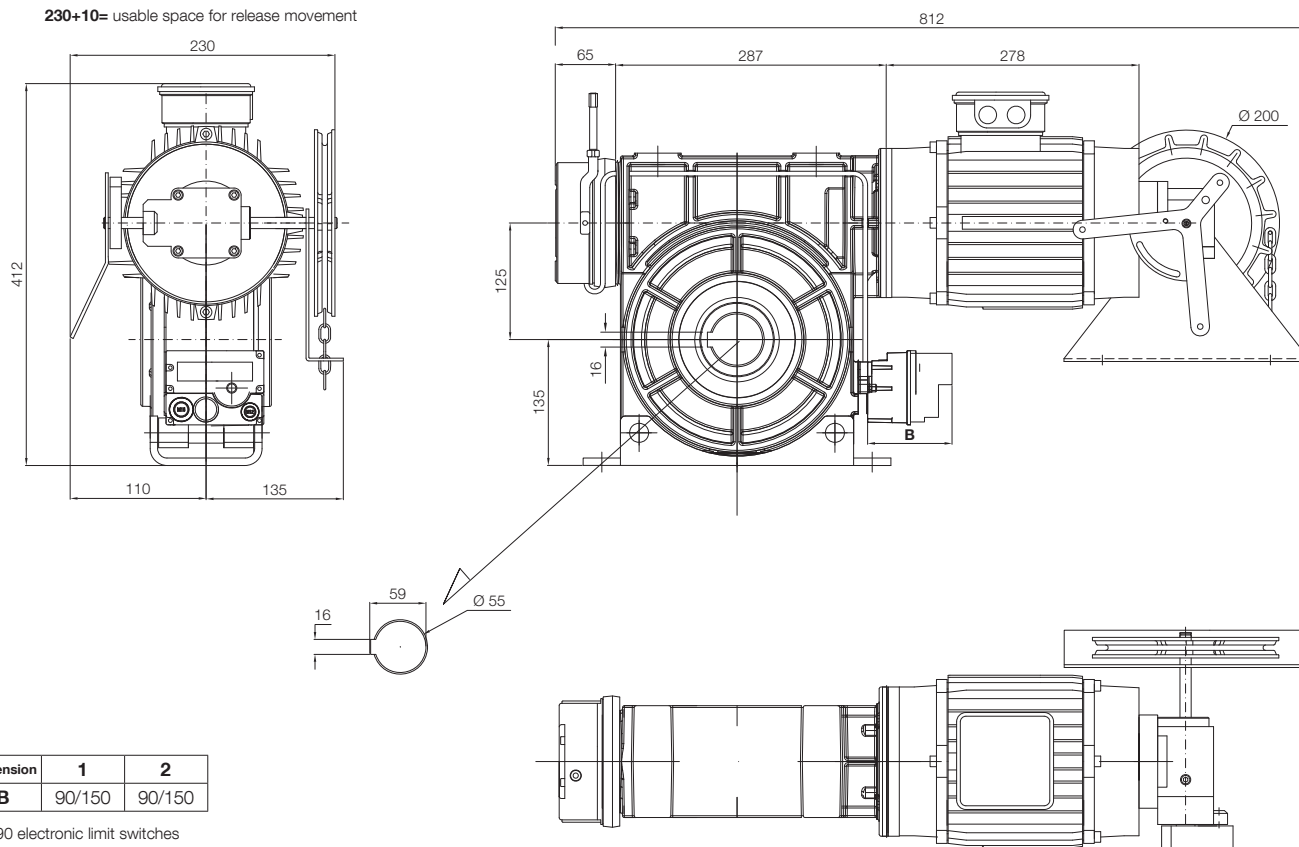
RDF-950-24-KU



B = 90 electronic limit switches
B = 150 mechanical limit switches

RDF-950-24-KE2

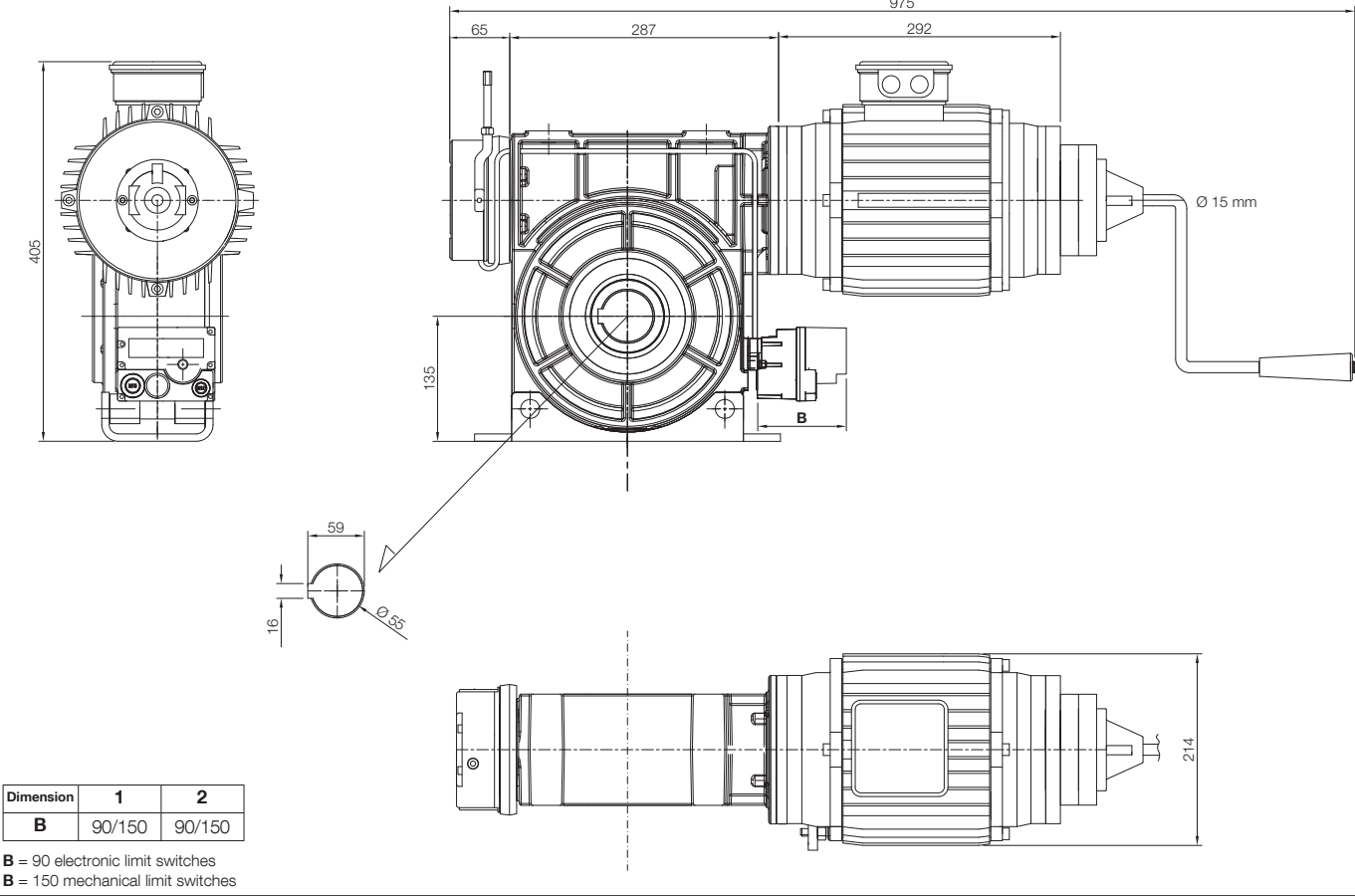
230+10= usable space for release movement



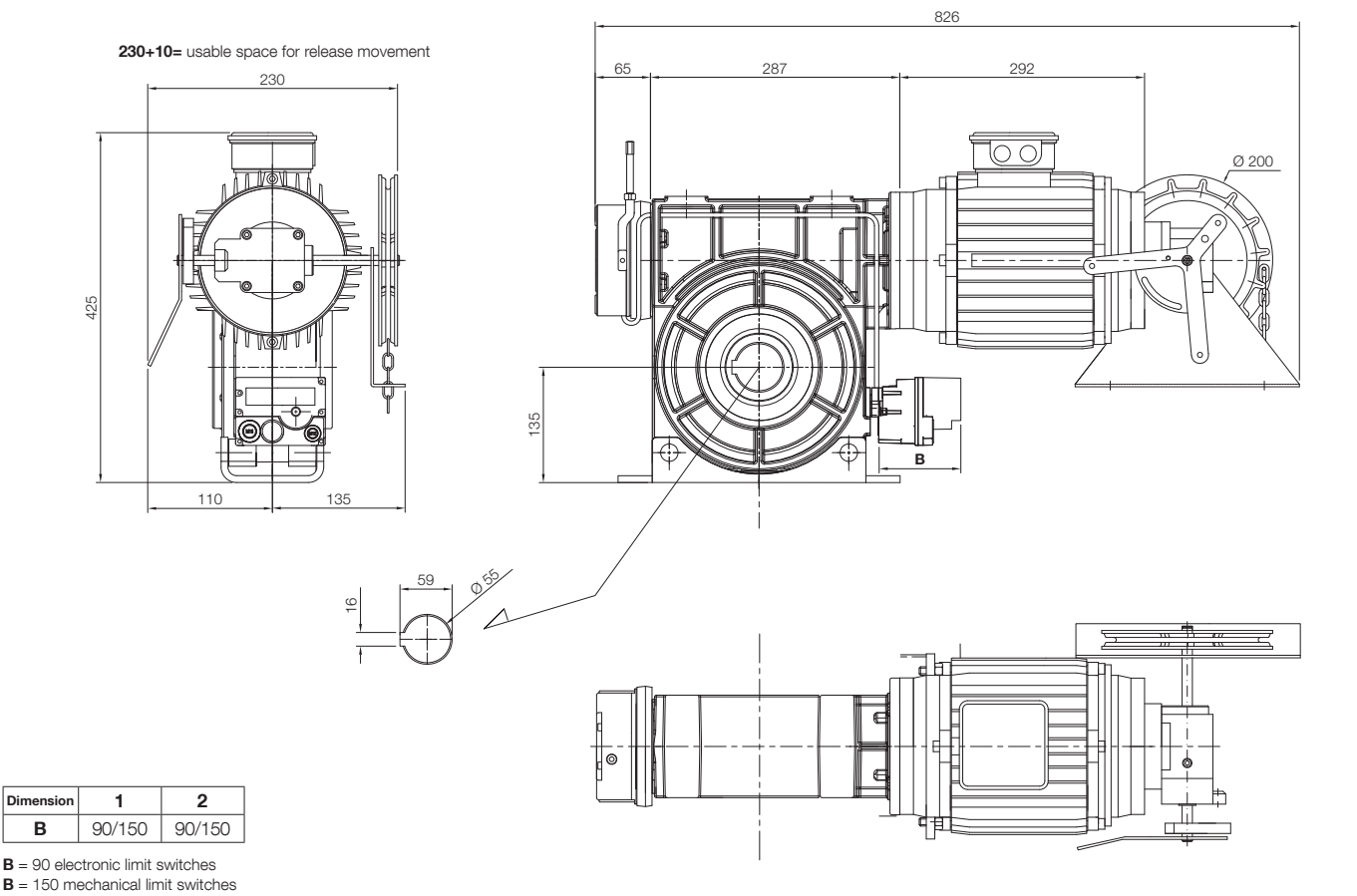
B = 90 electronic limit switches
B = 150 mechanical limit switches

Nice RDF series technical drawings for rolling shutters

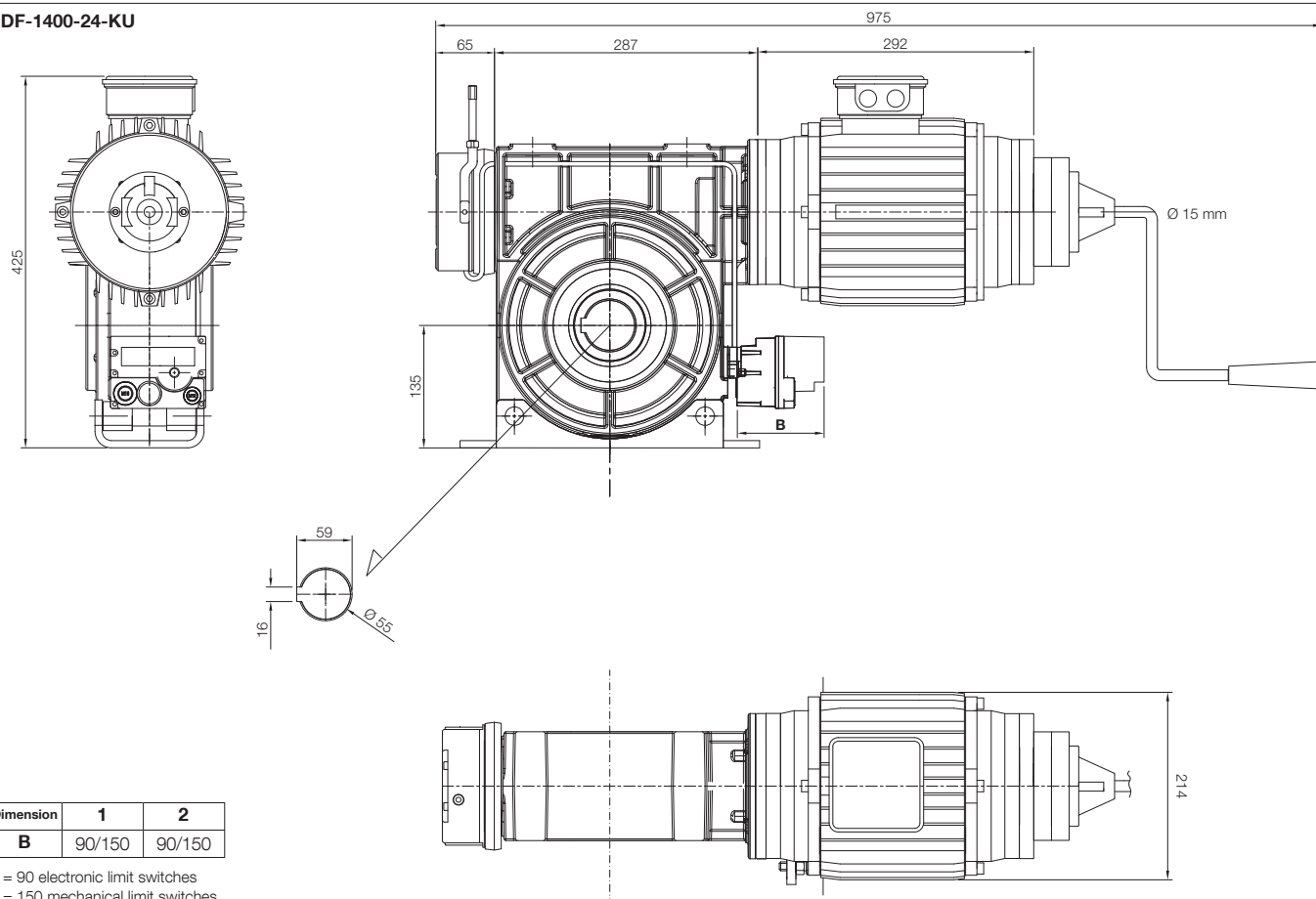
RDF-1250-24-KU



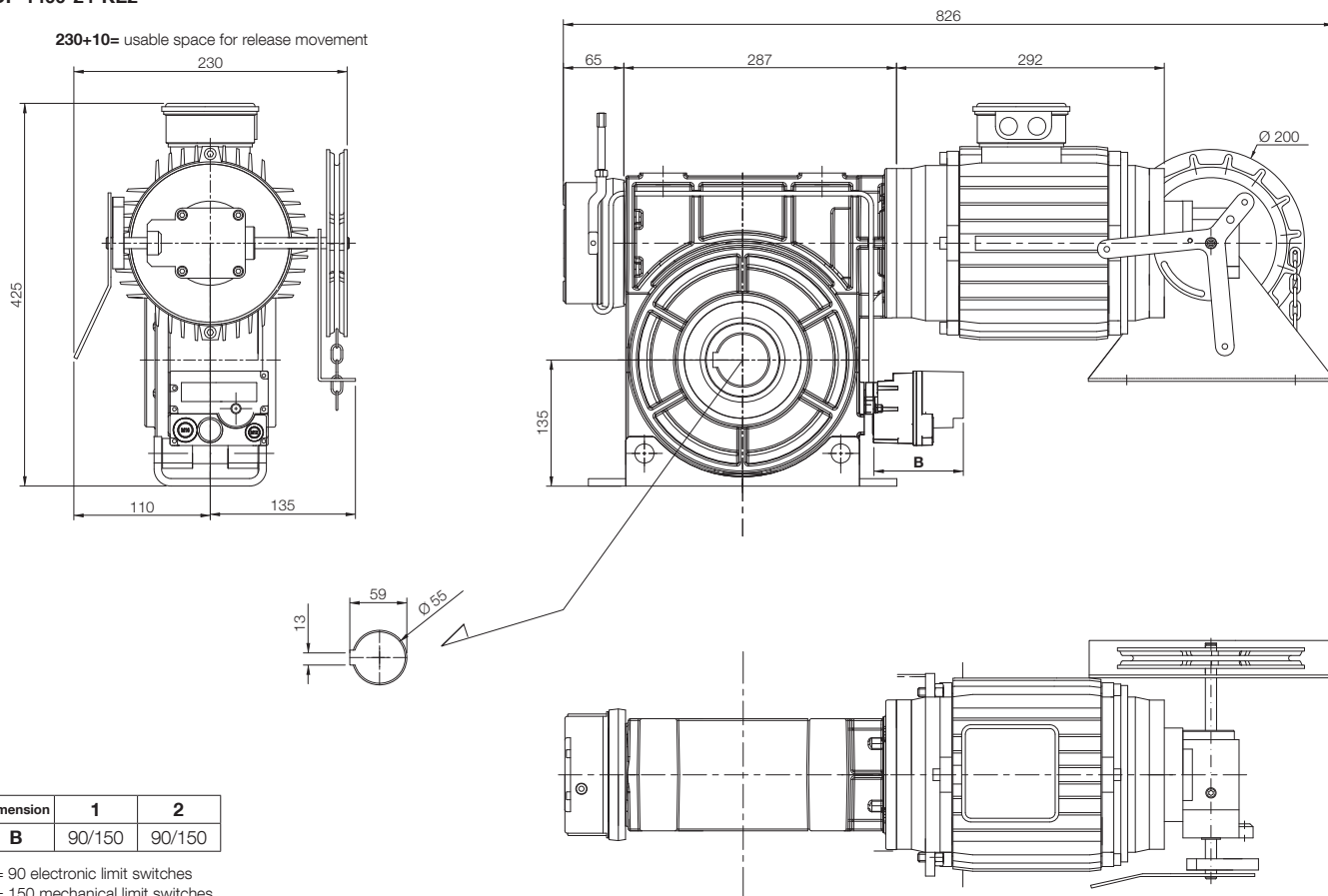
RDF-1250-24-KE2



RDF-1400-24-KU



RDF-1400-24-KE2

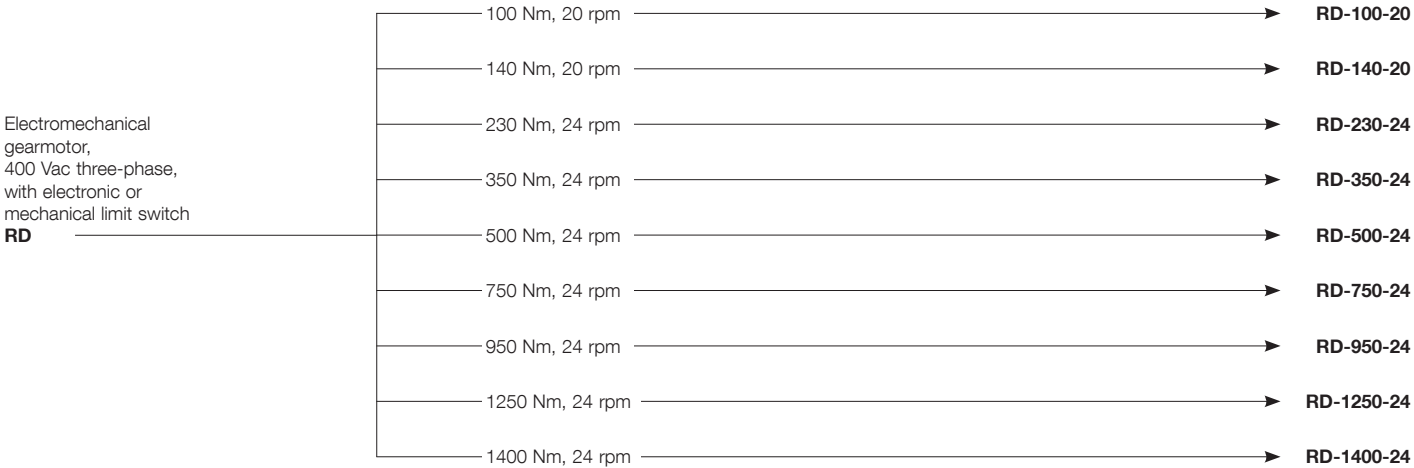


Nice RD series for shutters

with chain transmission selection guide

Follow the arrow and choose the right product

Gearmotors with chain transmission for rolling shutters

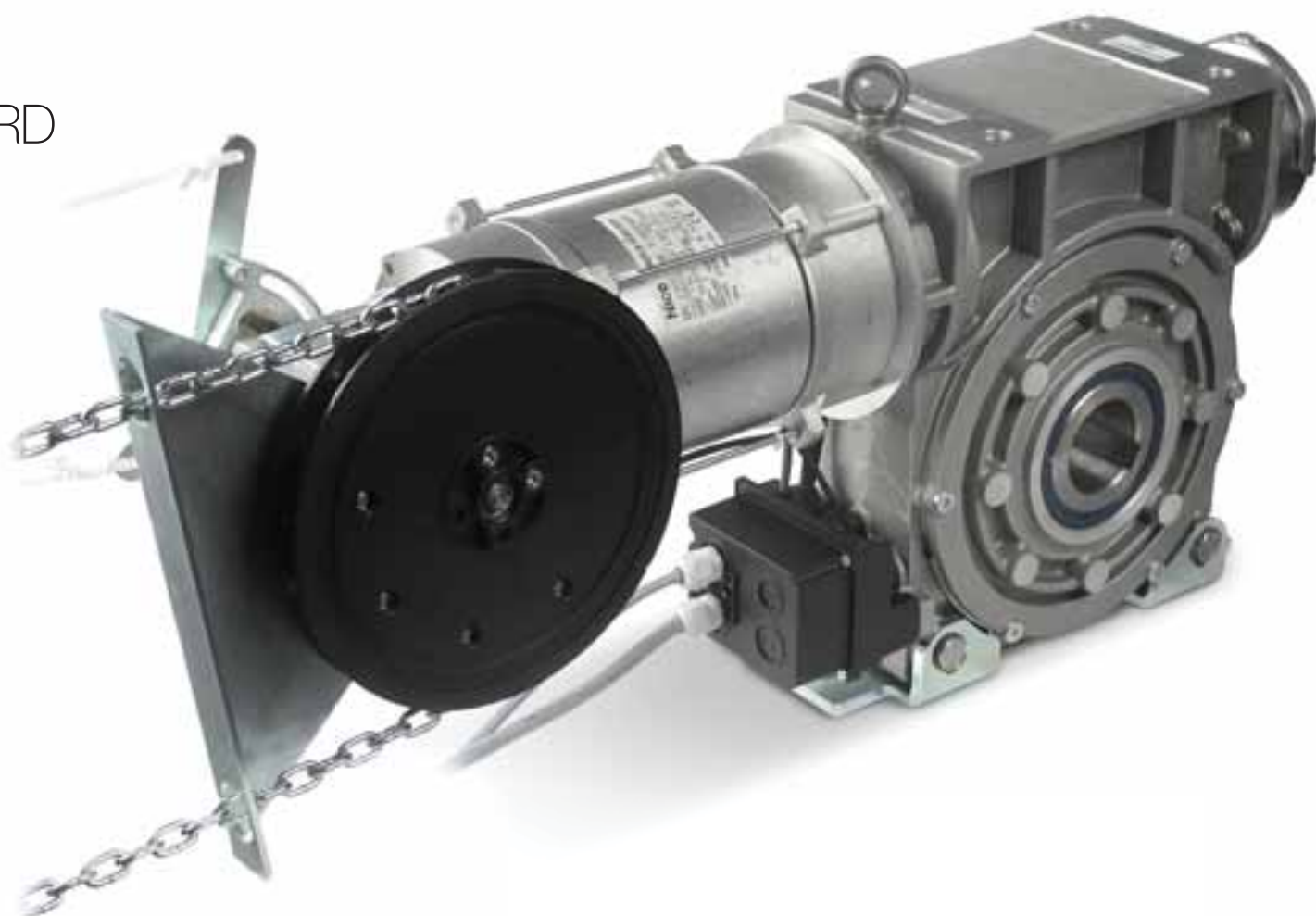


Indication of station choice to combine with the RD gearmotors

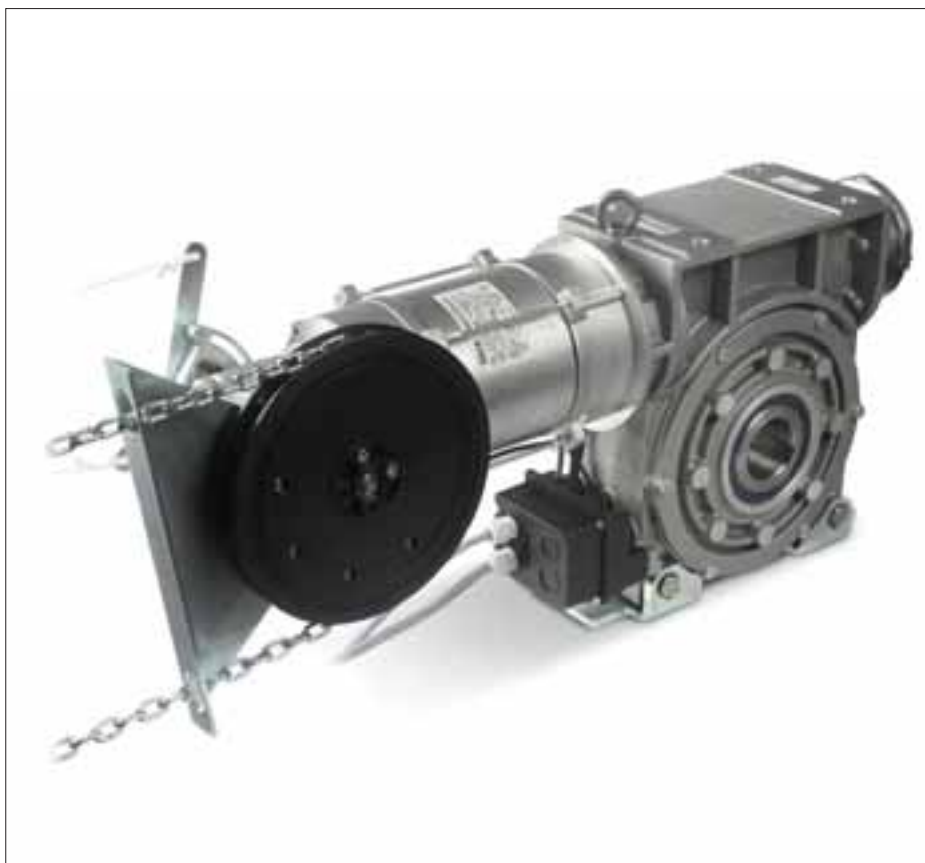
Control unit	RD Series Gearmotors		
	RD-100-20 RD-140-20	RD-230-24 RD-350-24 RD-500-24 RD-750-24	RD-950-24 RD-1250-24 RD-1400-24
UST2*	•		
UST1	•	•	•
UST1K-2.2 / 5.5kW	•	•	•
UST1K-1.1kW	•		

* to use only for gearmotors with mechanical limit switch.

RD



Nice RD series gearmotors for shutters with chain transmission



Electromechanical gearmotor for rolling shutters up to 5,550 kg.

**With integrated brake.
Chain-operated emergency (KE2 series) or handle-operated emergency with integrated parachute device.**

Simple installation:

The gearmotor is to be connected directly on the shaft of the rolling shutter through a chain or toothed wheel (Ø 30 mm, Ø 40 mm and Ø 55 mm).

Connection cables equipped with connectors simplify electrical installation.

Practical:

emergency release available in 2 versions:

- handle-operated emergency
- chain-operated emergency to offer the ideal solution for every type of application.

Compact and efficient:

torque up to 1400 Nm
speed up to 24 rpm.

Unbeatable safety:

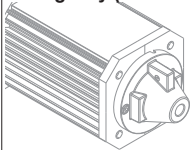
due to the antifall safety system and the chance to connect safety devices such as optical or resistive sensitive edges (8.2 kΩ).

Gearmotors compliant with the most recent European standards and directives in terms of safety and technology.

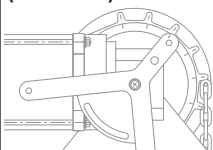
Service factor: up to 60%.

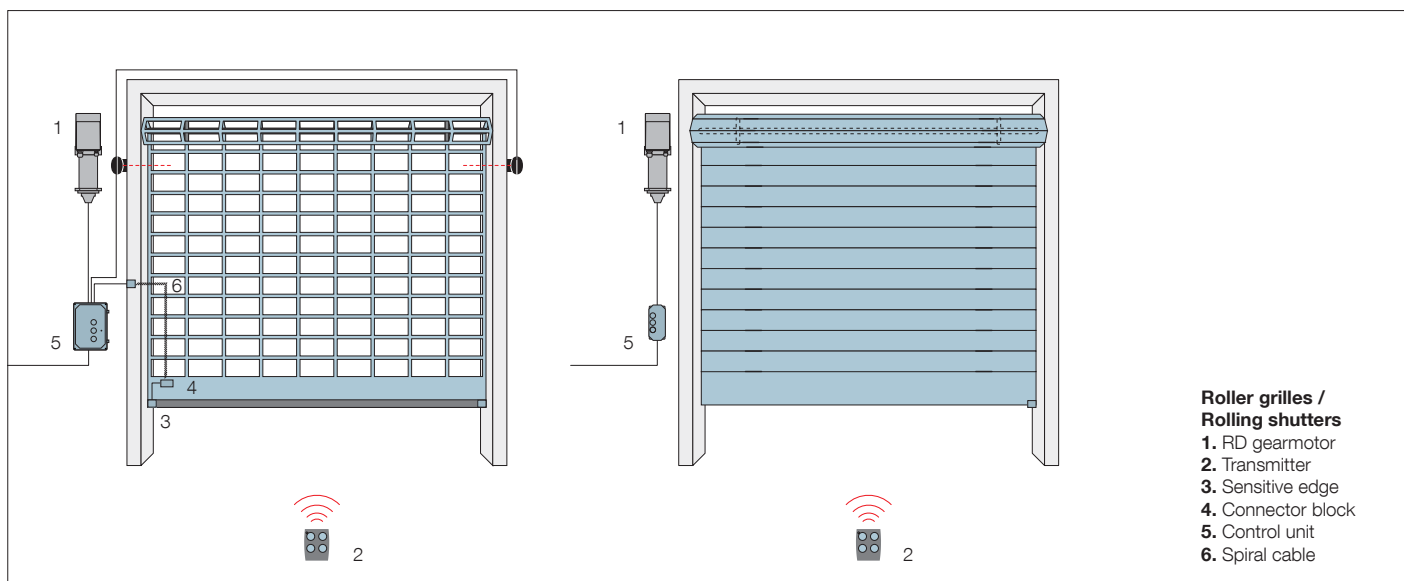
Available on request: special accessories for fastening, shafts and discs to be welded.

Handle-operated emergency (KU series)



Chain-operated (KE2 series)





Technical data

Model	RD-	100-20	140-20	230-24	350-24	500-24	750-24	950-24	1250-24	1400-24
Shaft Ø (mm)		30	30	40	40	40	55	55	55	55
Max. torque (Nm)		100	140	230	350	500	750	950	1250	1400
Rated torque (Nm)		80	120	200	310	450	650	850	1100	1250
Output rpm		20	20	24	24	24	24	24	24	24
Motor power (kW)		0,55	0,75	1,1	1,5	2,2	2,2	3	4	5,5
Limit switch rpm		15-40	15-40	10-40	10-40	10-40	10-40	10-40	10-40	10-40
Working voltage/frequency (V/Hz)		3x230 V / 3x400 V 50 Hz								
Duty Cycle		S 3 - 60%								
Connection cable (no. x mm²)		5 x 1,5								
Operating temperature (°C)		-5 ÷ +40								
Noise dB(A)		<70								
Protection rating (IP)		IP 54								
Weight (kg)		14,5	15	28	33	37	57	65	67	69

Nice RD series gearmotors for shutters with chain transmission

Selection table for reduction ratios 2:1, 3:1, 3.8:1 and 4.5:1

Max. shutter weight (kg)

Initial speed (cm/s)

Steel pipe EN 10220 (mm)

		101,6 x 3,6	108 x 3,6	133 x 4	159 x 4,5	177,8 x 5	193,7 x 5,4	219,1 x 5,9	244,5 x 6,3	273 x 6,3	298,5 x 7,1	323,9 x 7,1	
Gearmotor	2:1	RD-100-20	208	203	191	176	165	157	142	128	115	106	98
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD 140-20	290	285	268	248	231	220	198	179	162	149	138
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-230-24	479	470	440	407	381	363	326	295	266	245	227
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-350-24	729	715	670	620	580	552	496	449	405	373	350
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-500-24	1040	1021	958	885	830	789	710	642	579	533	494
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-750-24	1561	1532	1438	1328	1245	1184	1065	963	869	800	741
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-950-24	1979	1942	1822	1684	1577	1500	1350	1220	1101	1013	938
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-1250-24	2604	2555	2398	2216	2075	1974	1776	1605	1449	1333	1235
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
		RD-1400-24	2916	2862	2878	2482	2324	2210	1989	1798	1623	1493	1383
			6,4	6,7	8	9,4	10,4	11,2	12,5	13,9	15,3	16,7	18
3:1	RD-100-20	310	304	286	264	247	235	212	192	173	159	147	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD 140-20	437	427	402	370	347	330	298	268	243	223	207	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-230-24	718	705	662	610	571	544	490	442	400	367	340	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-350-24	1093	1072	1006	9930	870	827	745	674	608	560	518	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-500-24	1560	1532	1438	1329	1244	1184	1065	962	869	799	740	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-750-24	2343	2300	2158	1993	1868	1775	1598	1445	1304	1200	1111	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-950-24	2968	2912	2734	2525	2366	2250	2024	1830	1651	1520	1407	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-1250-24	3906	3832	3598	3322	3114	2960	2664	2408	2173	2000	1852	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	
	RD-1400-24	4375	4292	4030	3722	3486	3315	2984	2696	2434	2240	2074	
		4,2	4,5	5,3	6,3	6,9	7,5	8,4	9,2	10,2	11,1	12	

ATTENTION:

Valid for shutters 20 mm thick.

The weight table is based on a loss of friction value of 20%

Max. shutter weight (kg)

Initial speed (cm/s)

Steel pipe EN 10220 (mm)

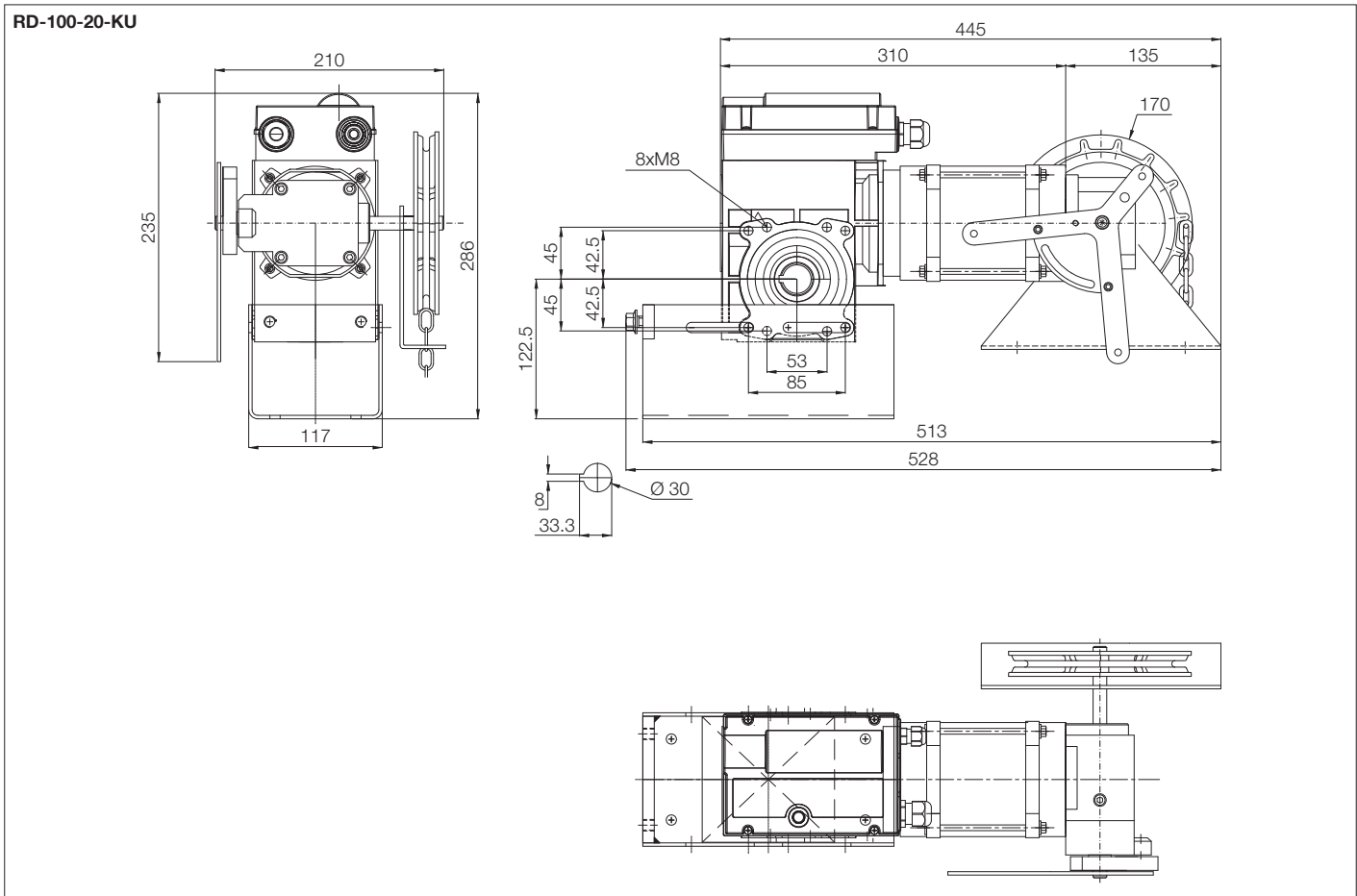
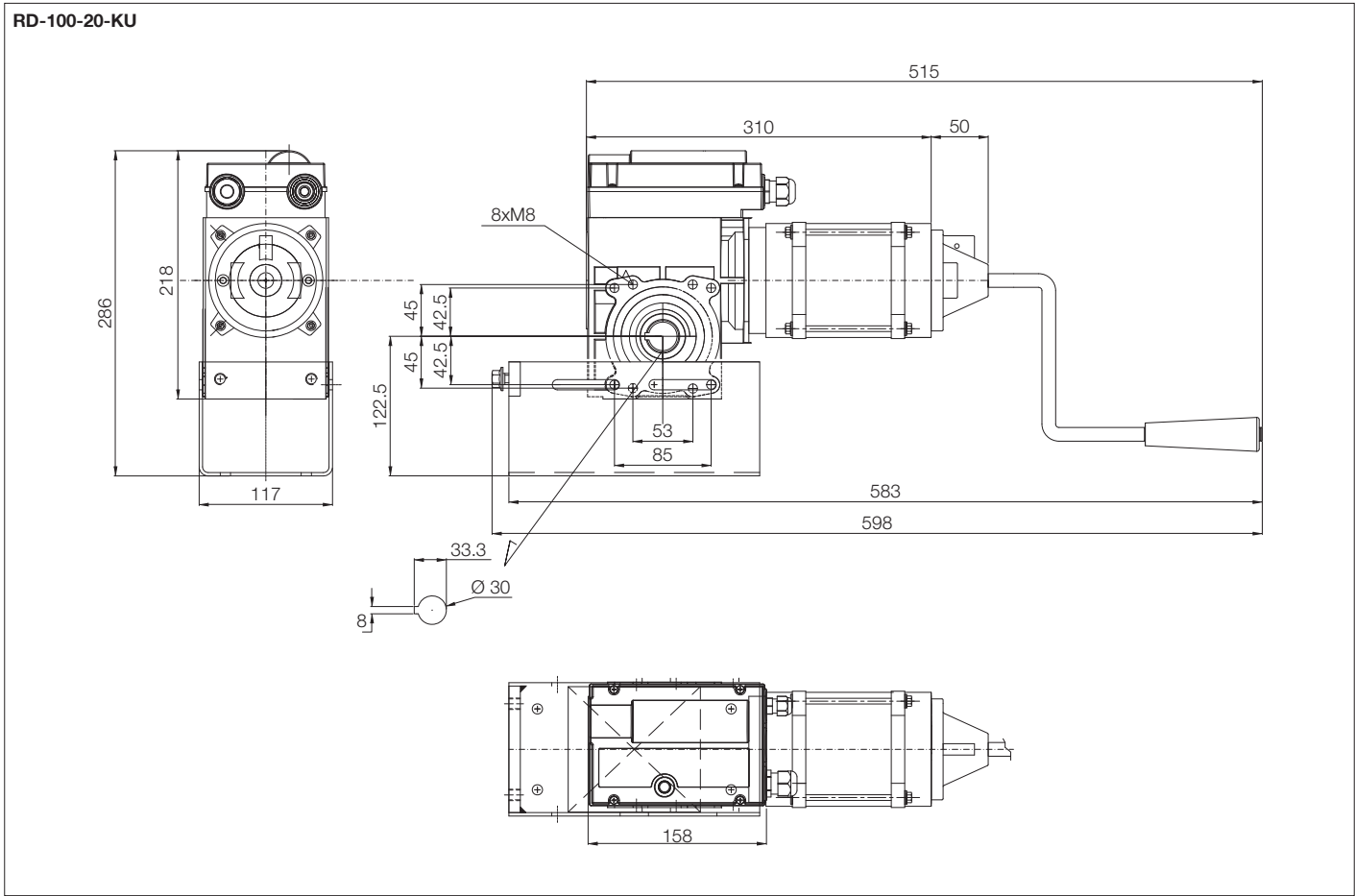
Gearmotor		Steel pipe EN 10220 (mm)										
		101,6 x 3,6	108 x 3,6	133 x 4	159 x 4,5	177,8 x 5	193,7 x 5,4	219,1 x 5,9	244,5 x 6,3	273 x 6,3	298,5 x 7,1	323,9 x 7,1
3,8:1	RD-100-20	392	385	363	335	313	300	270	243	220	293	187
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD 140-20	552	543	510	470	439	420	378	340	307	413	262
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-230-24	907	970	838	773	725	690	620	560	505	738	430
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-350-24	1385	1358	1275	1178	1102	1050	945	853	770	1032	657
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-500-24	1977	1942	1823	1682	1575	1500	1350	1220	1100	1475	937
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
4,5:1	RD-750-24	2965	2910	2735	2525	2365	2250	2025	1830	1652	2215	1407
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-950-24	3957	3690	3465	3200	2995	2850	2565	2318	2093	2805	1783
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-1250-24	4945	4855	4558	4210	3943	3750	3375	3050	2753	3692	2345
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-1400-24	5540	5438	5105	4715	4733	4200	3780	3415	3084	4135	2627
		3,4	3,5	4,2	4,9	5,5	5,9	6,6	7,3	8,1	8,8	9,5
	RD-100-20	468	457	428	395	371	355	318	287	260	347	222
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD 140-20	655	8688	602	555	520	495	445	403	365	487	310
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
4,5:1	RD-230-24	1078	1055	990	915	858	815	733	663	600	873	510
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-350-24	1640	1610	1510	1395	1305	1242	1118	1010	912	1223	777
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-500-24	2340	2300	2158	1992	1865	1775	1598	1443	1303	1748	1110
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-750-24	43515	3450	3238	2990	2800	2665	2395	2165	1955	2623	1667
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-950-24	4450	4370	4100	3788	3548	3375	3035	2745	2477	3323	2110
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-1250-24	5885	5750	5395	4985	4670	4440	3995	3612	3260	4373	2778
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8
	RD-1400-24	6500	6440	6045	5582	5230	4975	4475	4045	3652	4898	3112
		2,8	3	3,6	4,2	4,6	5	5,6	6,2	6,8	7,4	8

ATTENTION:

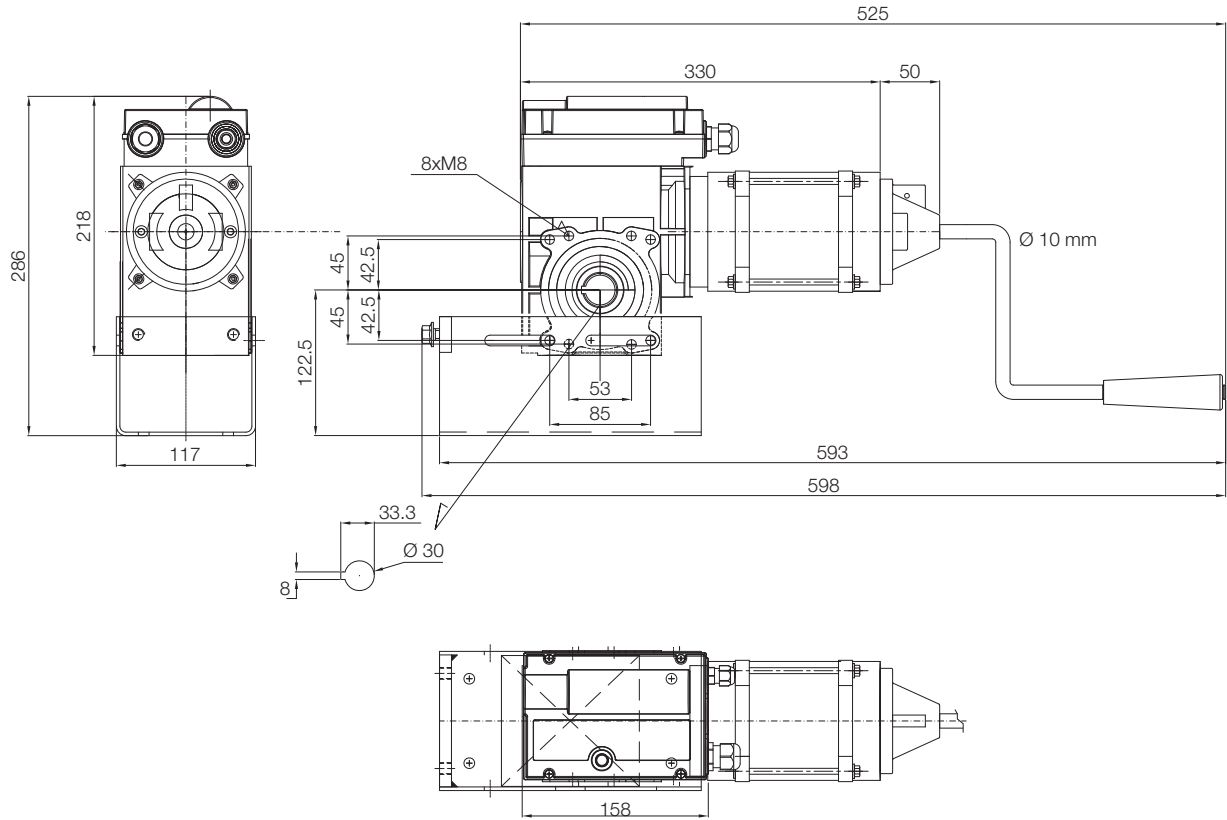
Valid for rolling shutters 20 mm thick.

The weight table is based on a loss of friction value of 20%

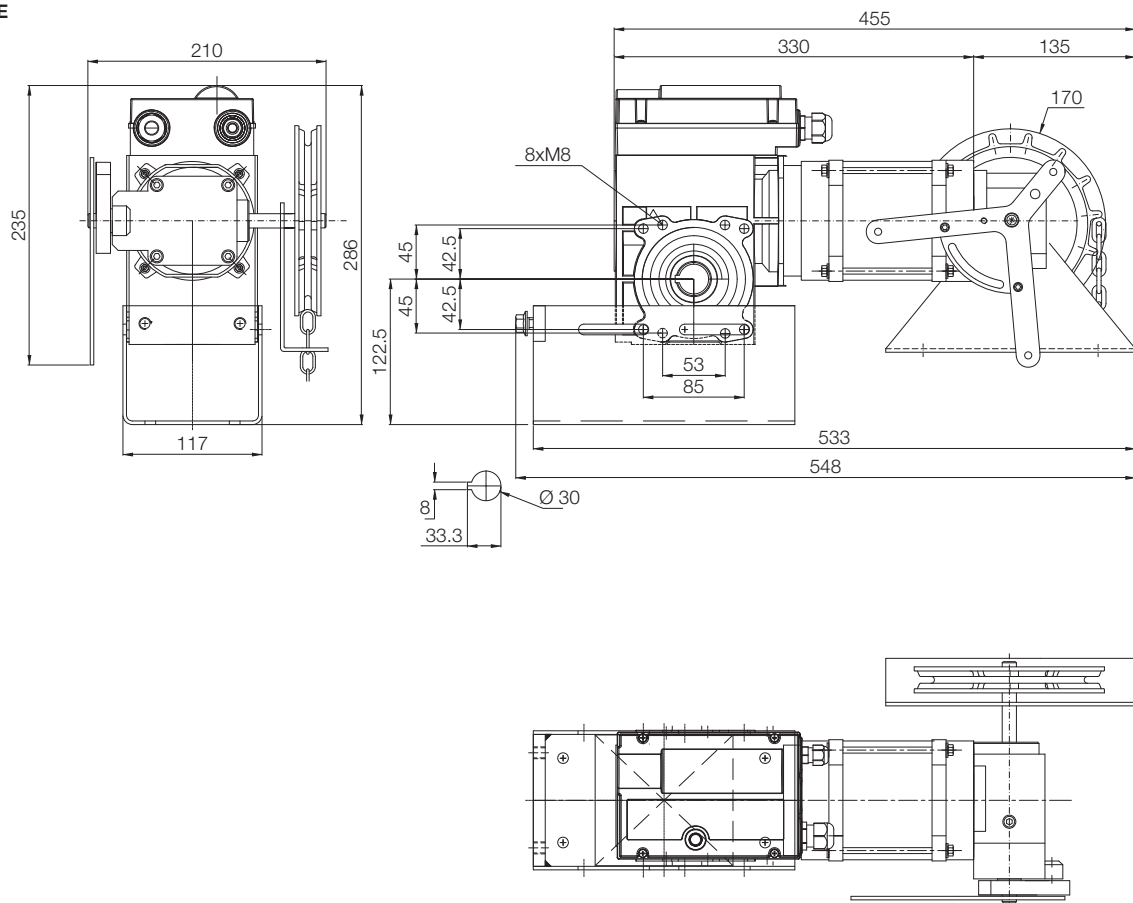
Nice RD series for shutters
with chain transmission technical drawings



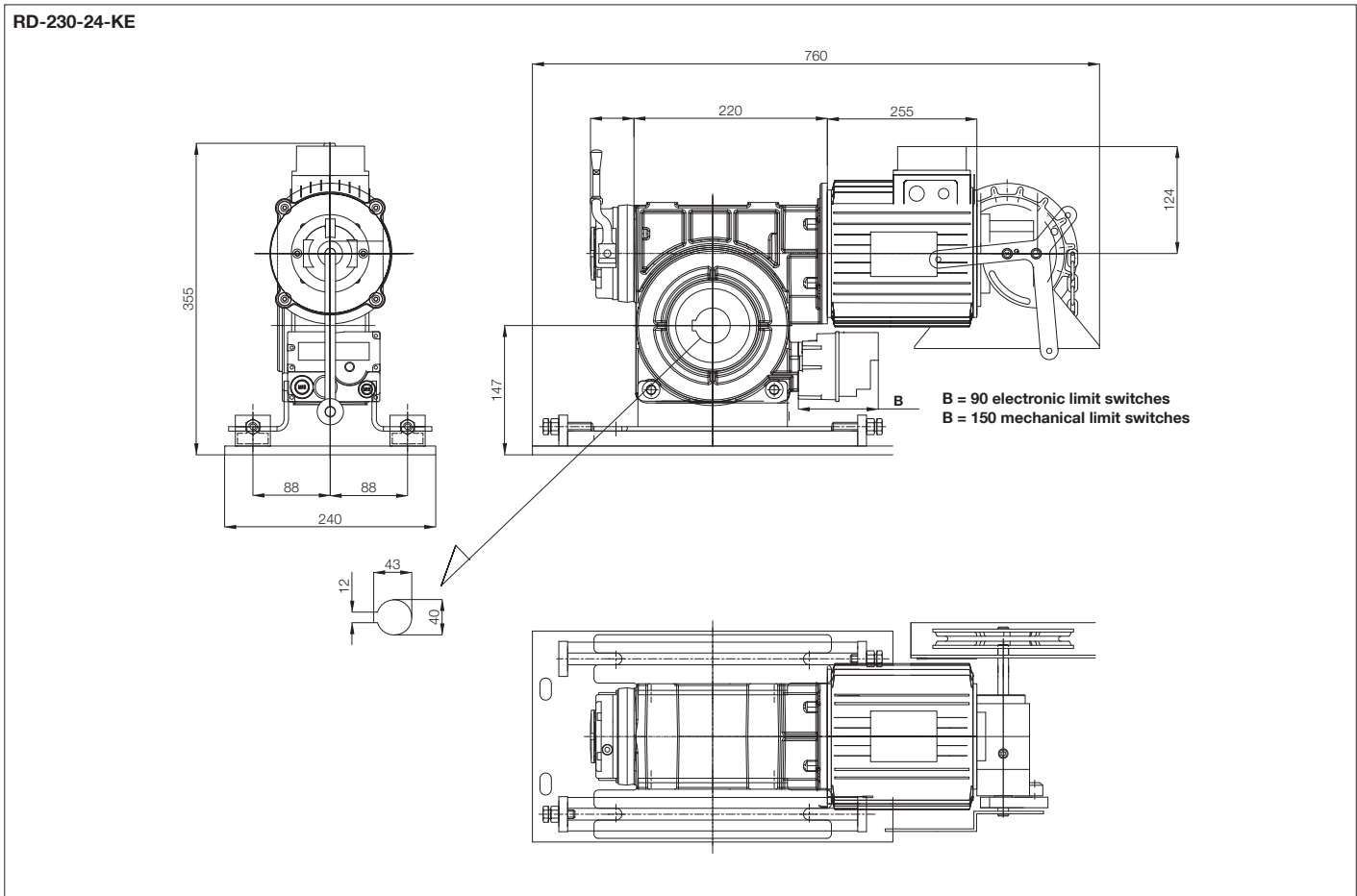
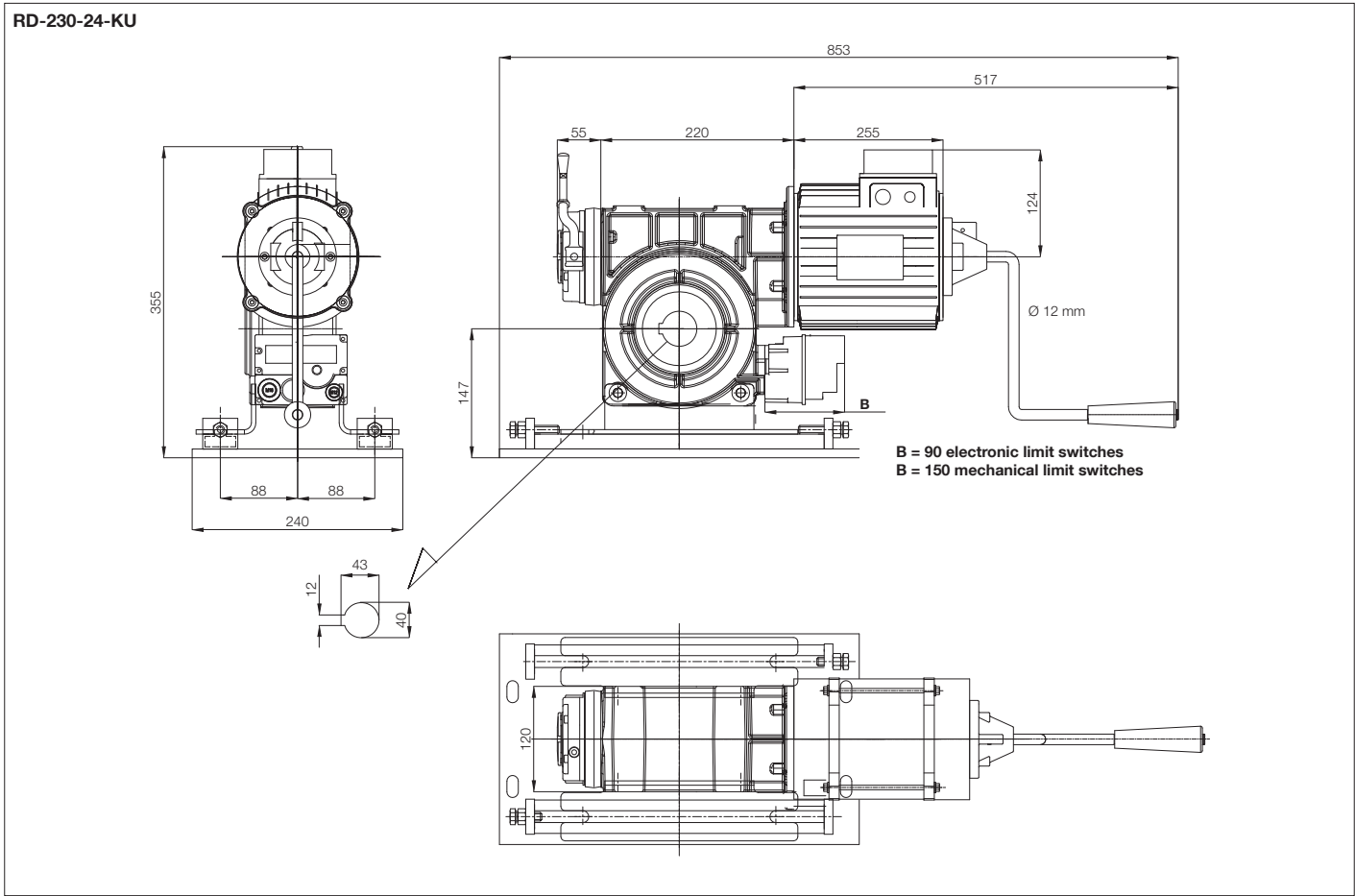
RD-140-20-KU



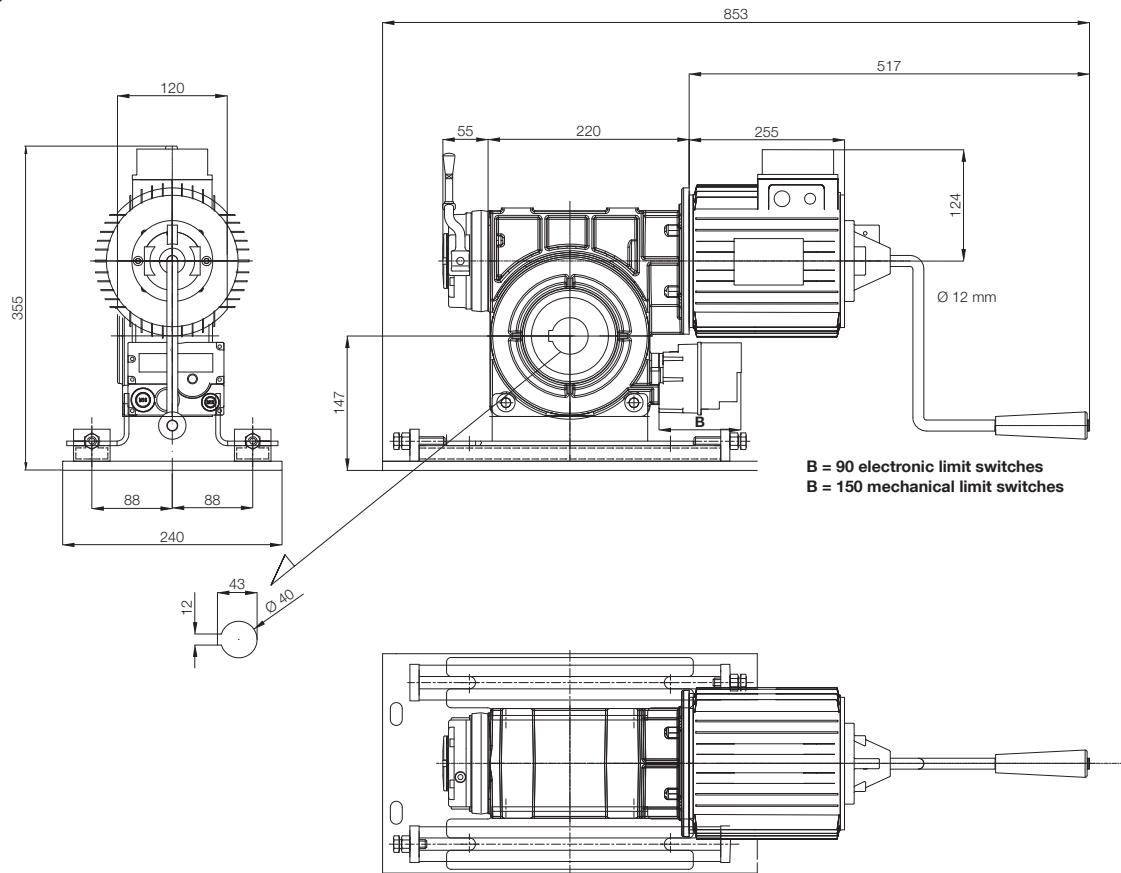
RD-140-20-KE



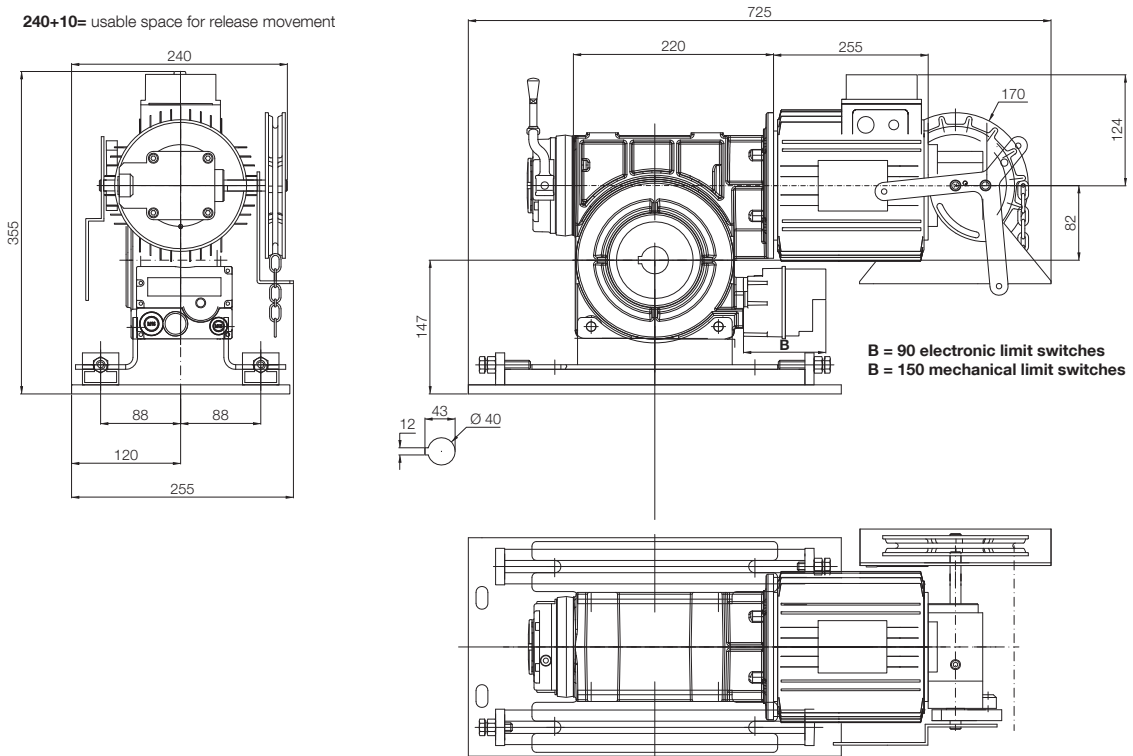
Nice RD series for shutters with chain transmission technical drawings



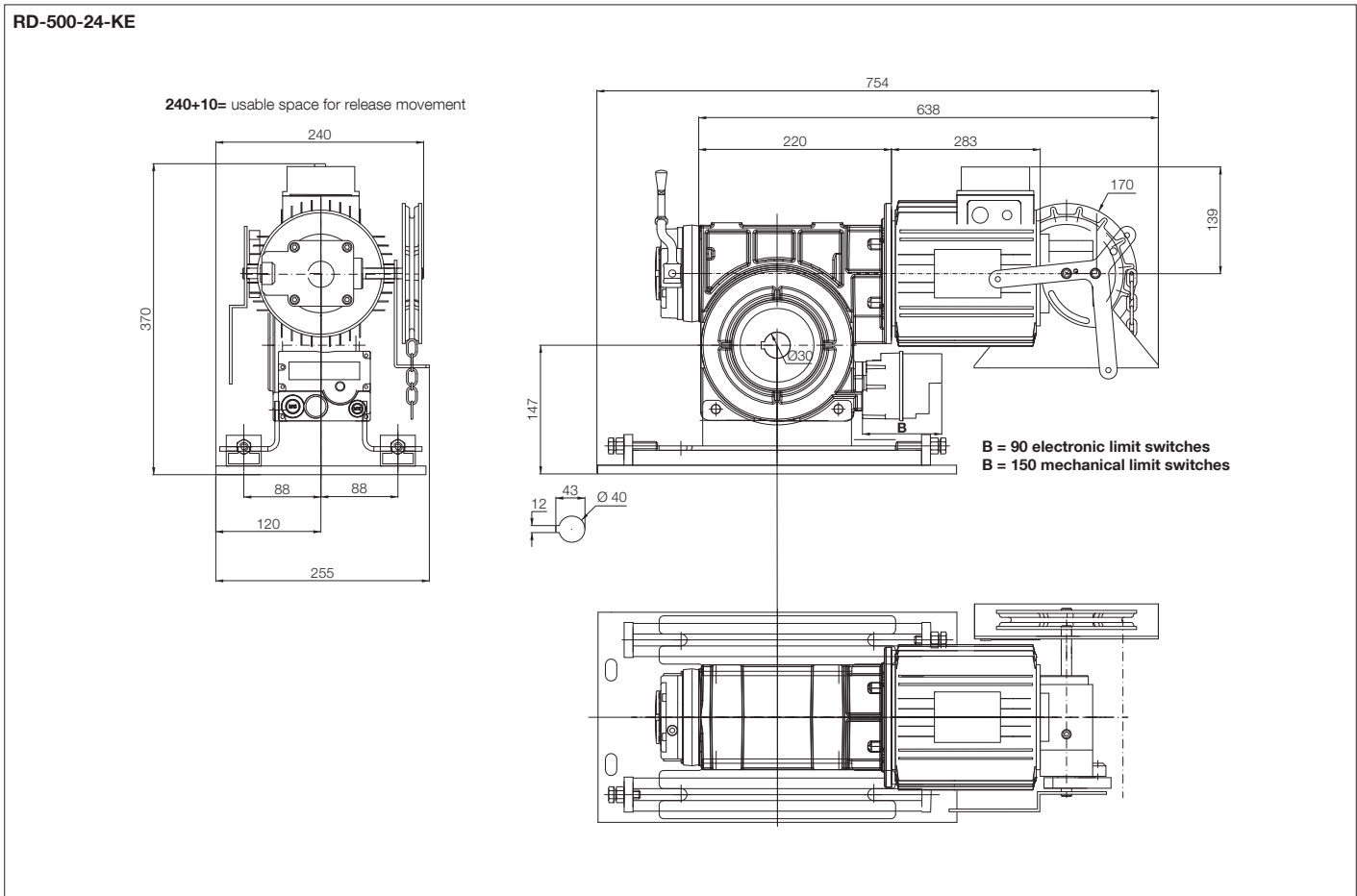
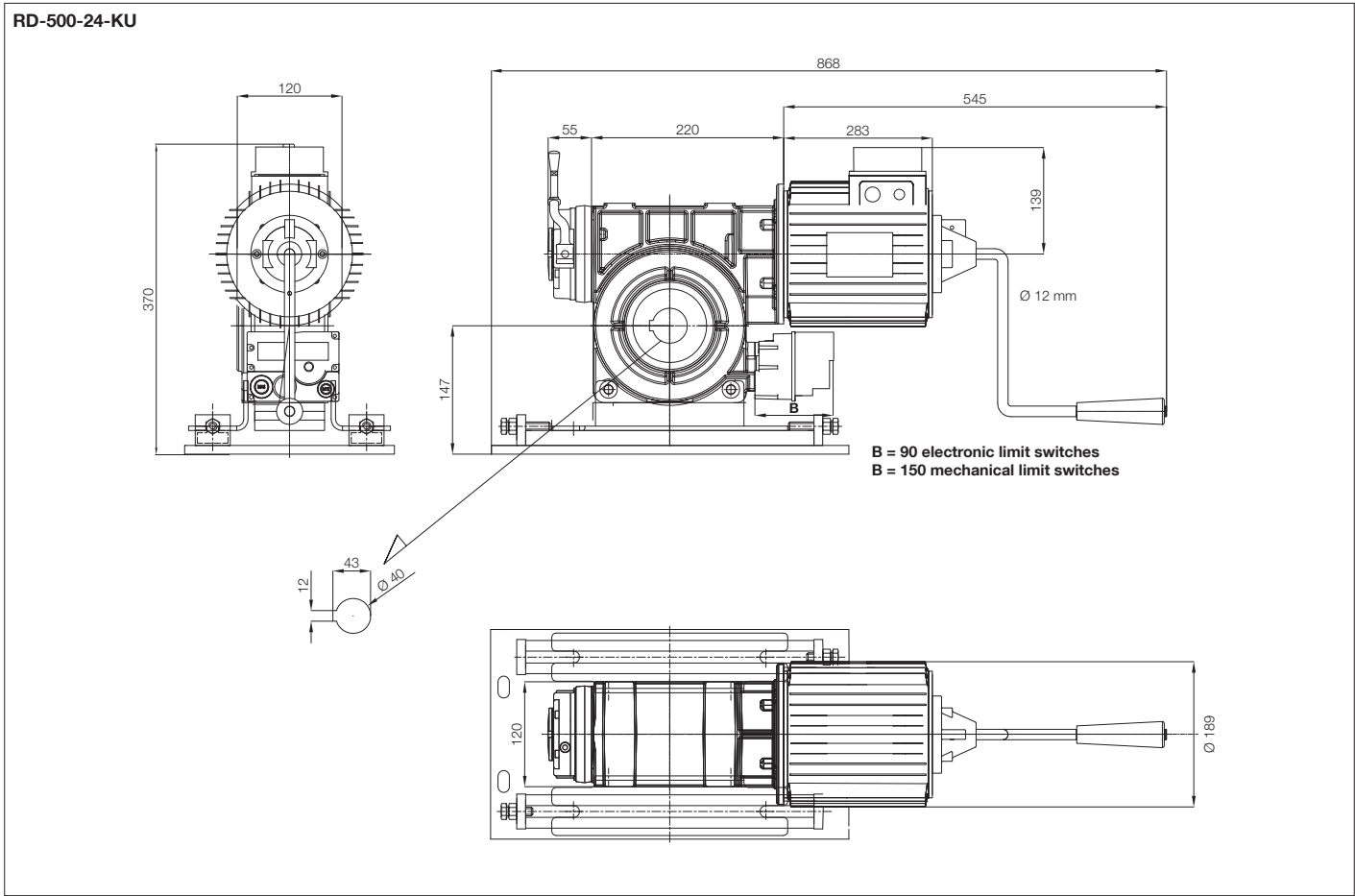
RD-350-24-KU



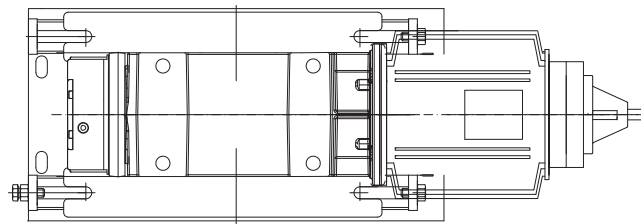
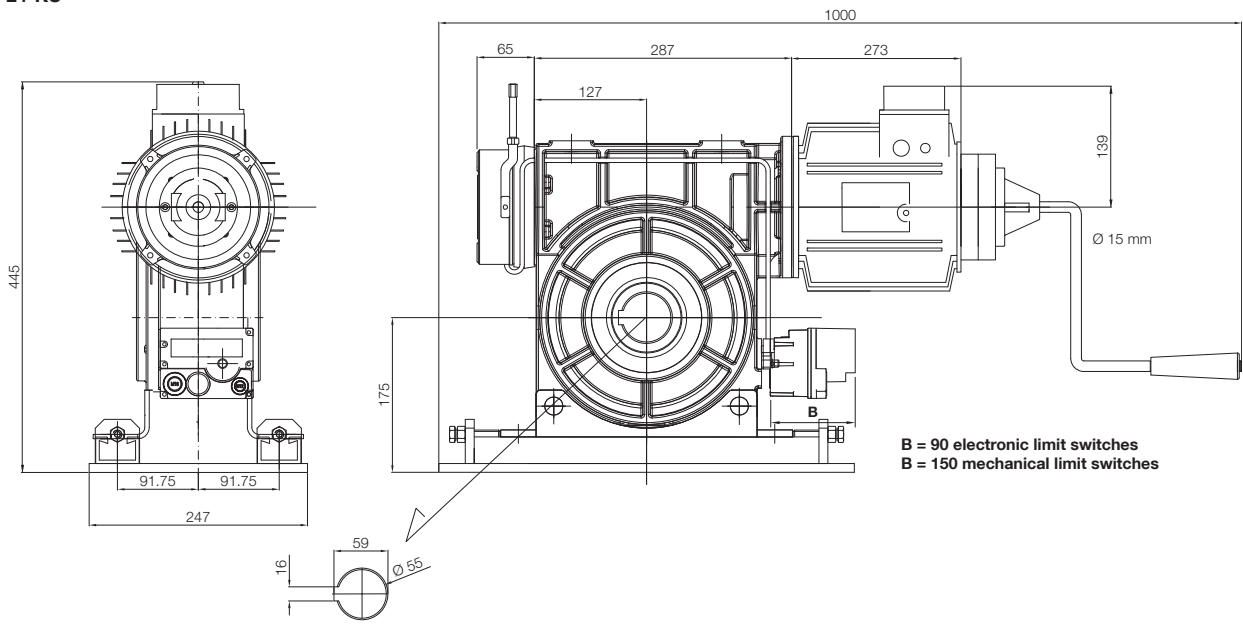
RD-350-24-KE



Nice RD series for shutters with chain transmission technical drawings

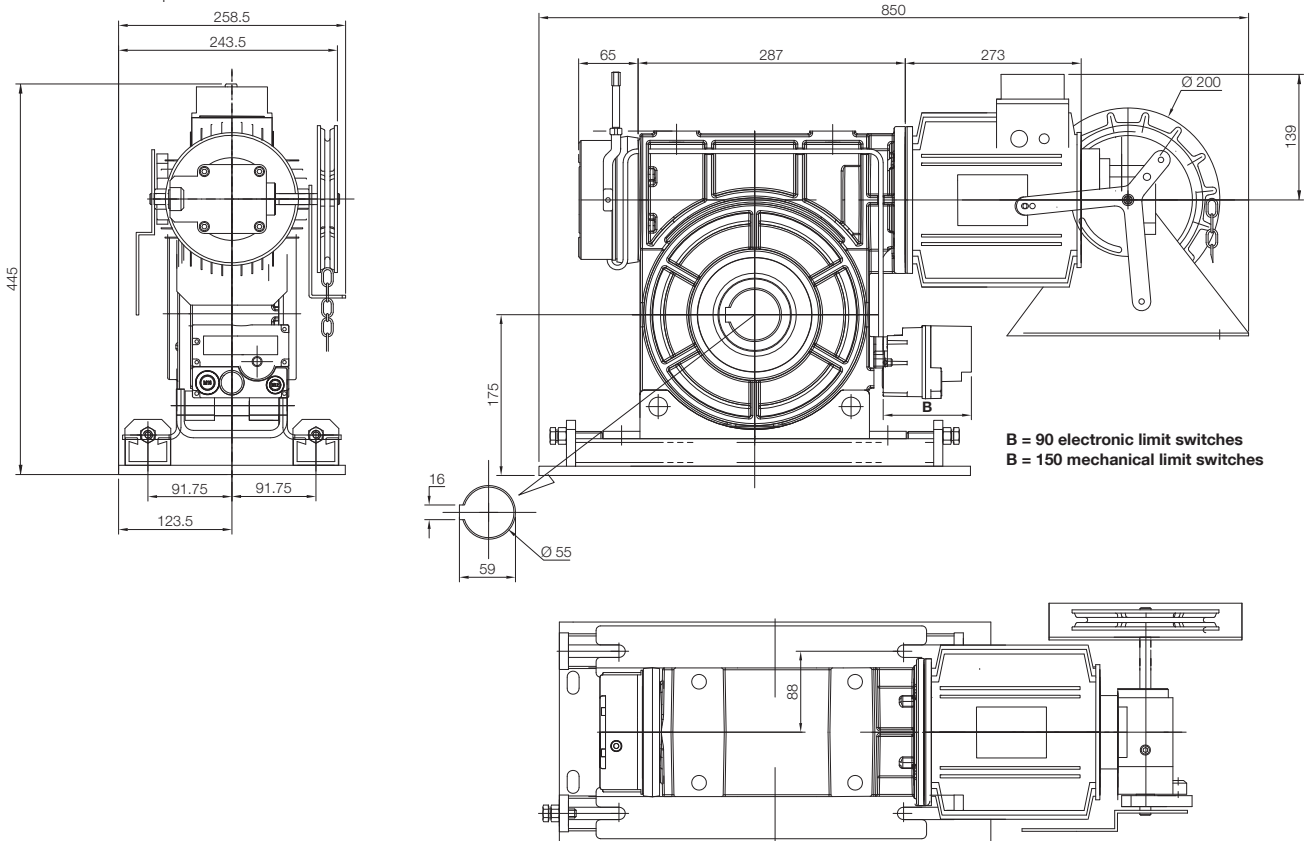


RD-750-24-KU



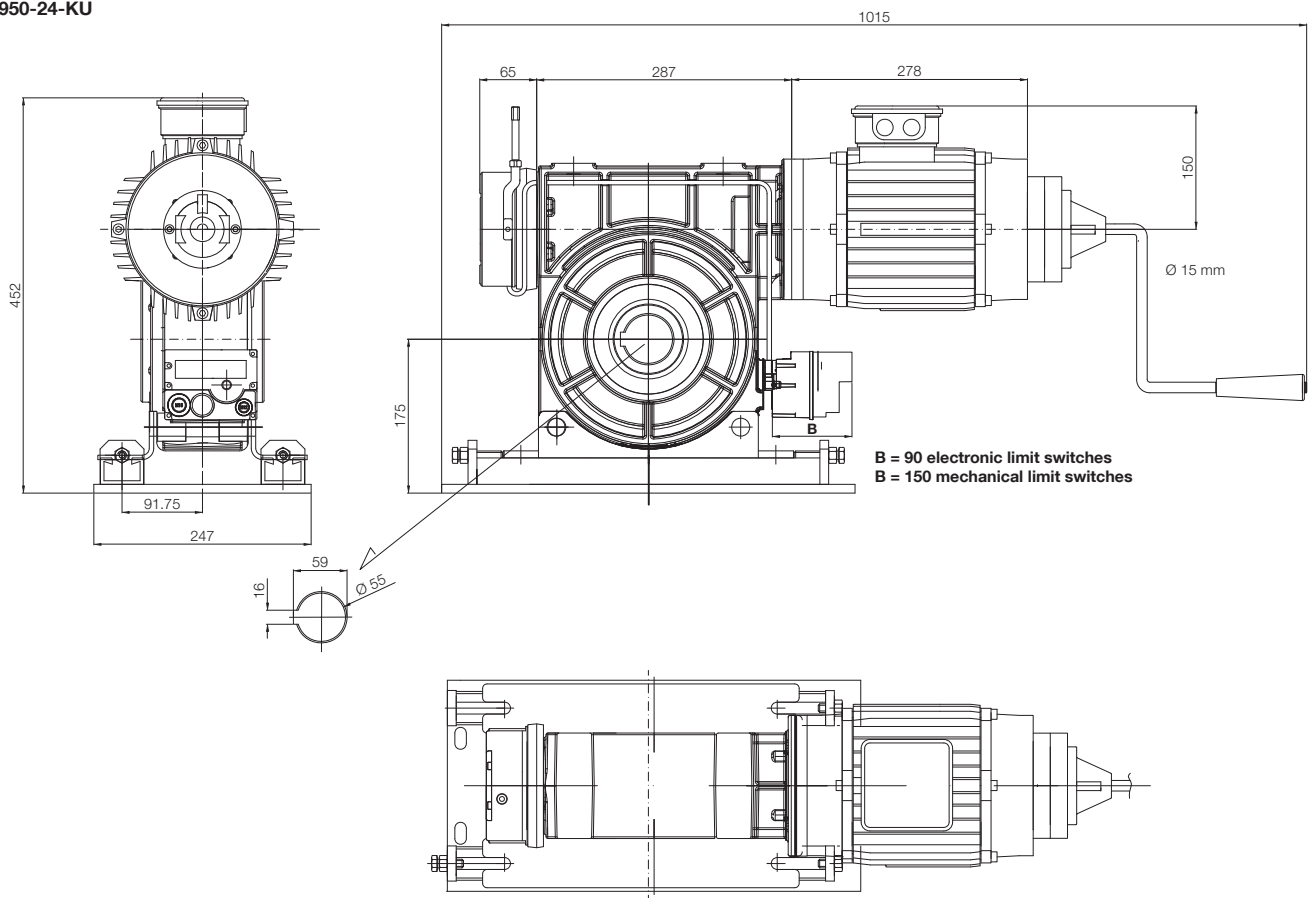
RD-750-24-KE

243.5+10= usable space for release movement



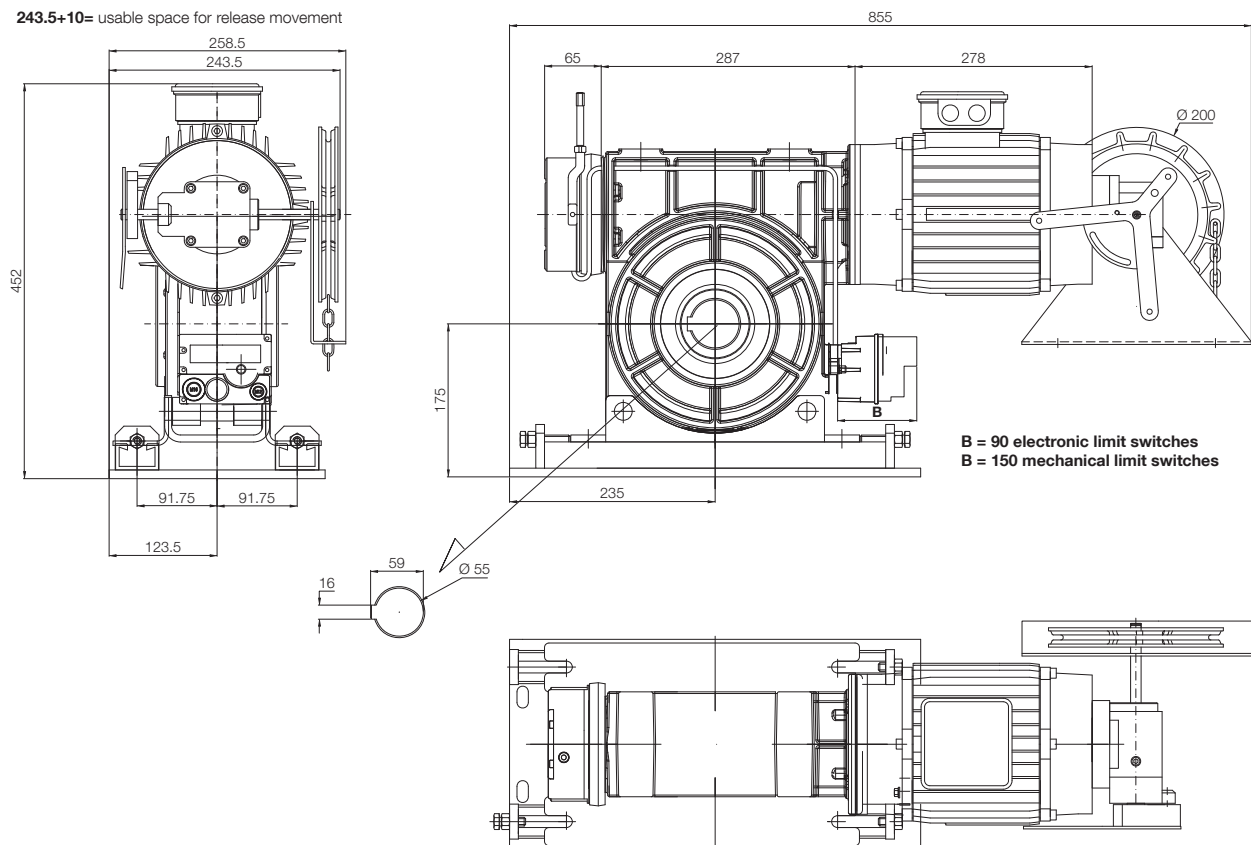
Nice RD series for shutters with chain transmission technical drawings

RD-950-24-KU

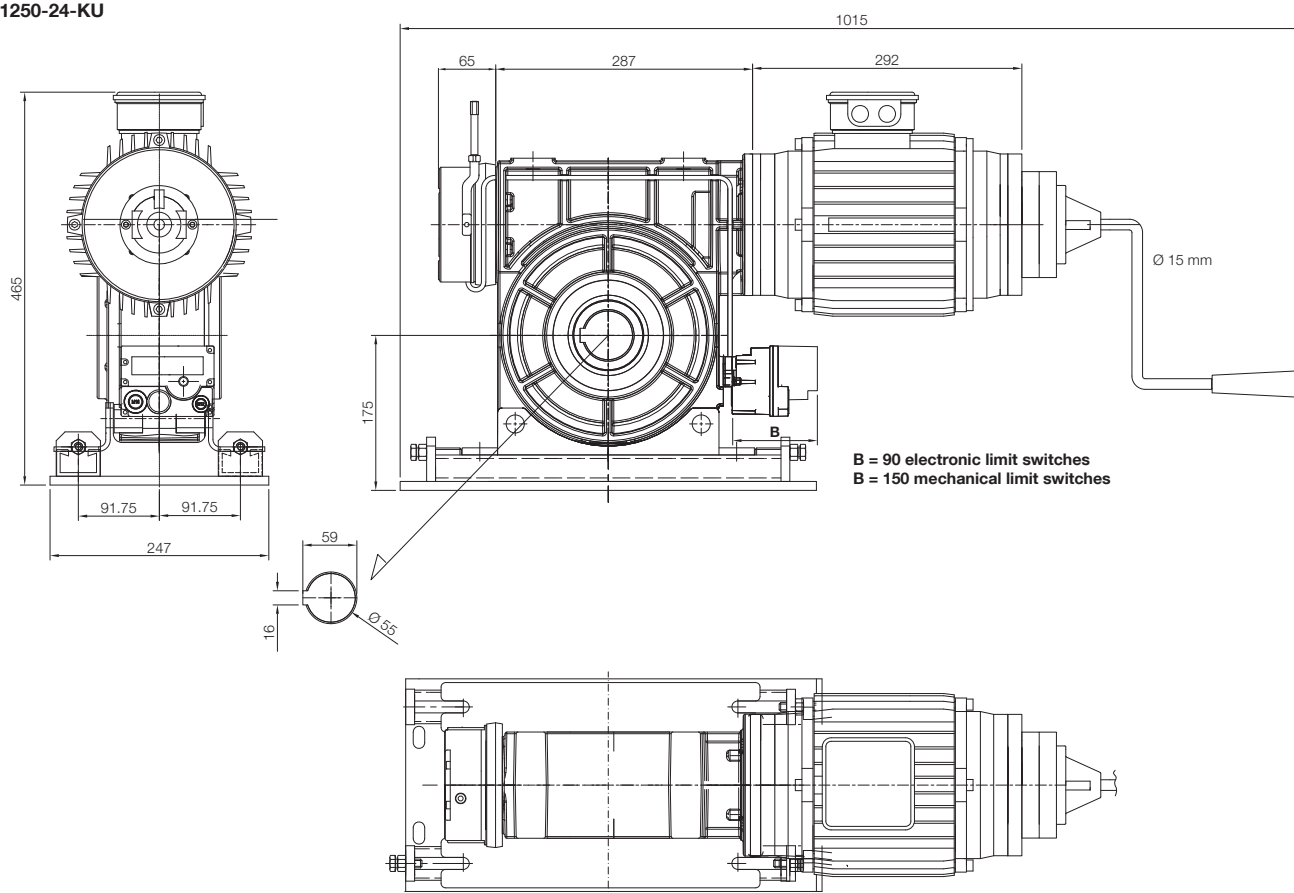


RD-950-24-KE

243.5+10= usable space for release movement

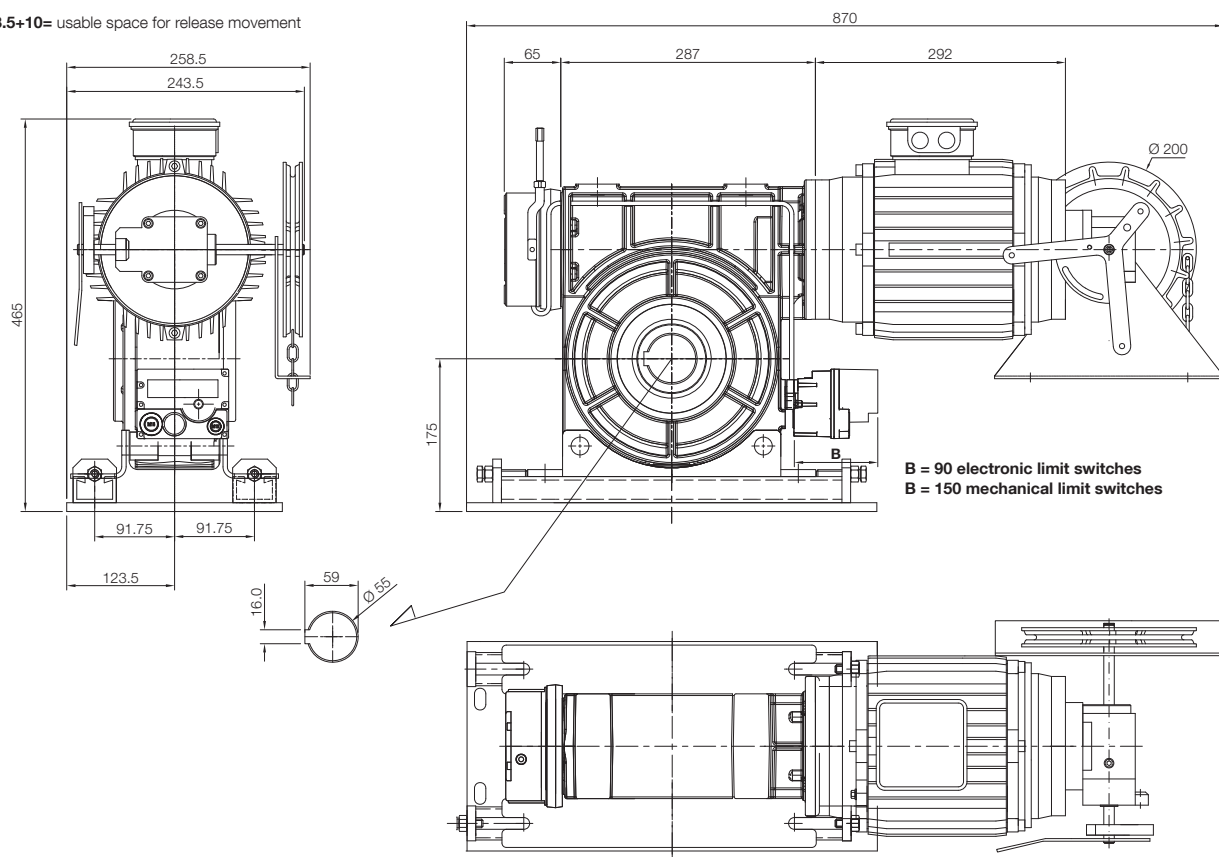


RD-1250-24-KU

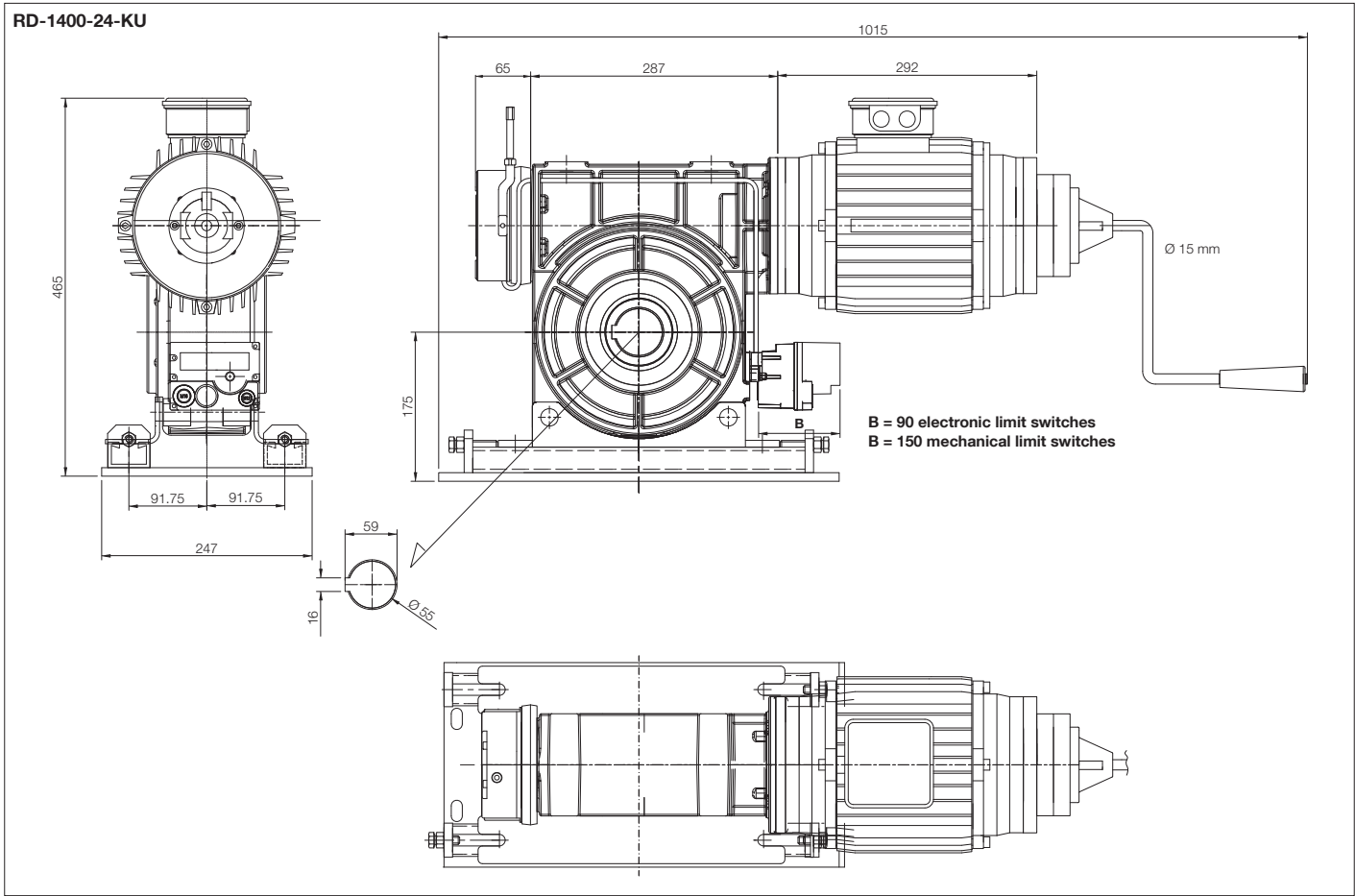


RD-1250-24-KE

243.5+10= usable space for release movement

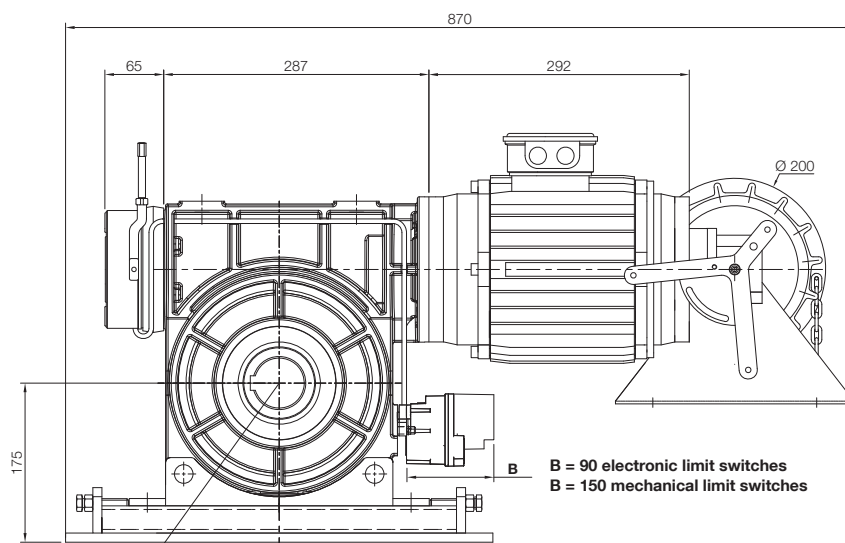
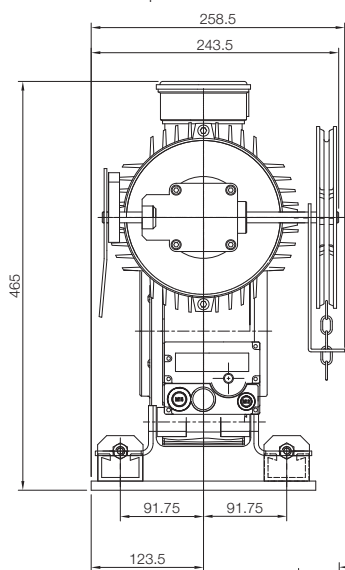


Nice RD series for shutters
with chain transmission technical drawings

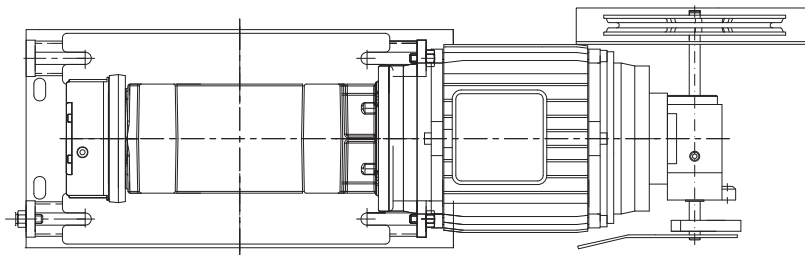
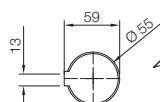


RD-1400-24-KE

243.5+10= usable space for release movement



B = 90 electronic limit switches
B = 150 mechanical limit switches



Nice Control units

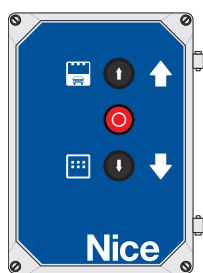
The electronic control units complete the range of Nice IndustrialDoors products. They have been developed on the basis of many years of experience and offer the ideal solution for any requirement. Almost all Nice IndustrialDoors control units can be expanded with one or more additional modules. Every module performs a particular function so as to be able to always select and configure the ideal control system for every application.

All commonly used safety components, such as photocells, and sensitive optical and resistive (8,2 k Ω) edges, can be connected.

The additional modules for UST1 series control units make it possible to enable special functions and/or change all of the operations parameters, including waiting times, door opening positions, etc.

For sectional doors, rolling shutters and high speed doors

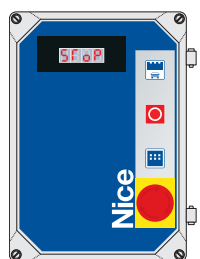
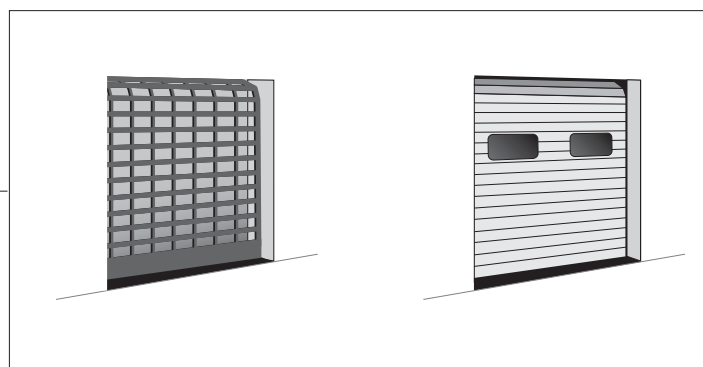
The stations of the UST1, UST1K and UST2 series are normally used to control gearmotors for sectional doors and rolling shutters. The UST1-FU version with integrated inverter is particularly recommended for gearmotors for high speed doors.



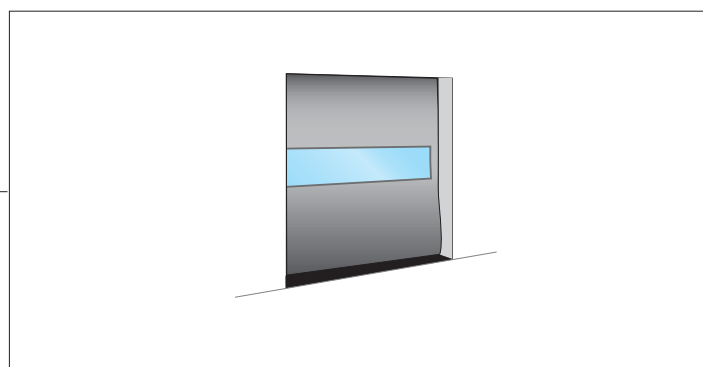
UST1 and UST1K



UST2



UST1-FU

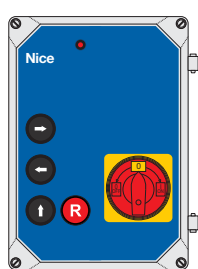


For loading ramps

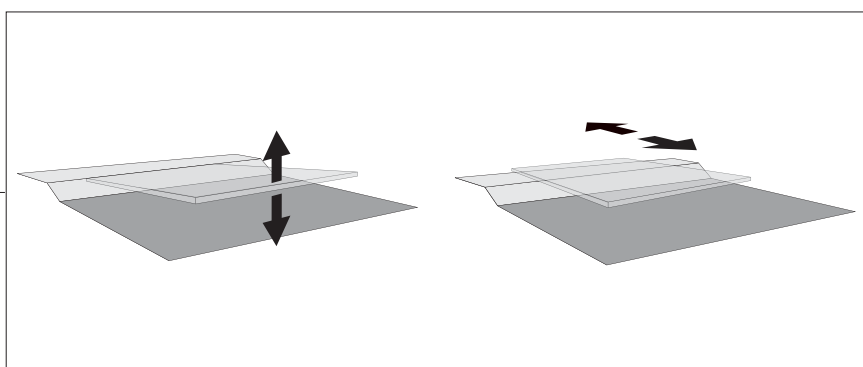
The control units of the UDL1 and UDL2 series are dedicated to loading ramp movement with a choice of basic functions (UDL1) and advanced functions and customisations (UDL2).



UDL1



UDL2

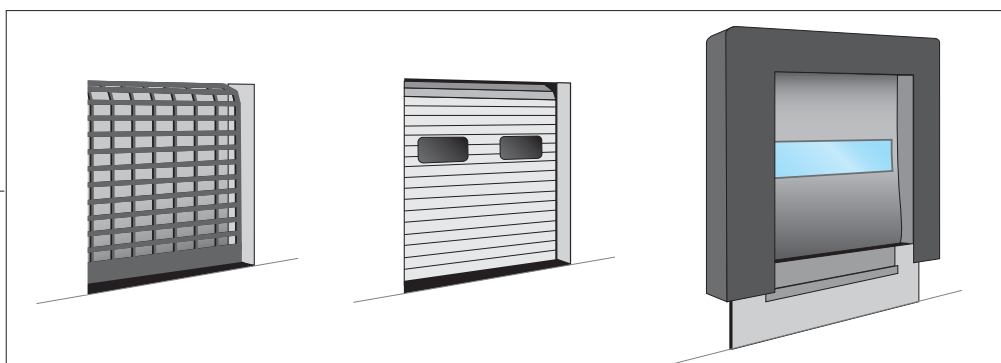


For sectional doors and shutters, loading ramps

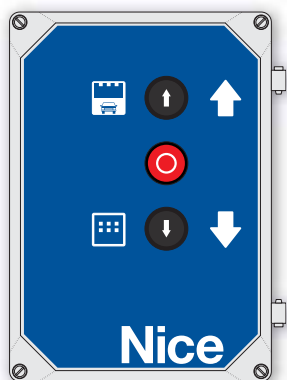
The Combi Control unit combines the functions of the UST1K and UDL2 systems in the same housing to provide joint control of sectional doors and shutters, and loading ramps.



Combi-Control



Nice UST1 control units



Code	Description
NDCC0008	UST1-2.2kW UST1-2.2kW without plug
NDCC0009	UST1-2.2kW UST1-2.2kW with EEC plug

Technical data

Type	UST1-2,2kW	UST1-5,5kW
Power supply	3 x 400 Vac 50 Hz (with 6 and/or 10 A fuses)	
Max. motor power	2.2 kW	5.5 kW
Motor connection reverse contactor	2x3 NO relay contacts 400 V/max. 2.2 kVA	2x3 NO relay contacts 400 V/max. 5.5 kVA
Power at rest	< 3VA	
Ambient temperature	from -20°C to +50°C	
Control voltage	24 Vdc Additional delayed 0.8 A fuse	
Protection rating	IP 54 (IP 65 on request)	
Dimensions	255 x 120 x 180 mm (HxDxW)	

UST1 control unit with deadman mode.
It is ideal for sectional doors and rolling shutters.
It is possible to connect different expansion modules to operate additional functions.

The UP and DOWN buttons on the cover are used to operate the door.

Simplec ontrol

- Deadman mode
- Direction of rotation control
- Operation with mechanical limit switch
- Connection of additional modules
- Operation with electronic limit switch (optional)
- Connection of OXl2 radio (optional)
- Emergency stop switch (optional)
- Connection of external control transmitters.

For gearmotors up to 2.2kW - UST1-2.2kW.
For gearmotors up to 5.5kW - UST1-5.5kW.

Nice UST1K control units



Code	Description
NDCC0022	UST1K-1.1 kW station with EEC plug
NDCC0029	UST1K-1.1 kW with signalling LED and EEC plug

Technical data

Type	UST1K-1,1kW	UST1K-2,2kW	UST1K-5,5kW
Power supply	3 x 400 Vac 50 Hz (with 6 and/or 10A fuses)		
Max. motor power	1.1 kW	2.2 kW	5.5 kW
Motor connection - reverse contactor	2x3 NO relay contacts 400 V/max. 1.1 kVA	2x3 NO relay contacts 400 V/max. 2.2 kVA	2x3 NO relay contacts 400V/max. 5.5 kVA
Power at rest	< 4VA		
Ambient temperature	from -20°C to +50°C		
Control voltage	24 Vdc Additional delayed 0.8 A fuse		
Protection rating	IP 54		
Dimensions	255 x 120 x 180 mm (HxWxD)		

UST1K control unit.
It is ideal for sectional doors and rolling shutters.
It is possible to connect different expansion modules to operate additional functions.

The UP and DOWN buttons on the cover are used to operate the door.

Flexibility

- Automatic and deadman modes
- Direction of rotation control
- Operation with electronic or mechanical limit switch
- Connection of additional modules
- Connection of OXl radio (optional)
- Emergency stop switch (optional)
- Connection of external control transmitters

For gearmotors up to 1.1kW - UST1-1.1kW.
For gearmotors up to 2.2kW - UST1K-2.2kW.
For gearmotors up to 5.5kW - UST1K-5.5kW.

Nice UST1-FU control units



The UST1-FU control unit is ideal for high speed doors. It is possible to connect different expansion modules to activate additional functions.

The UP and DOWN buttons on the cover are used to operate the door.

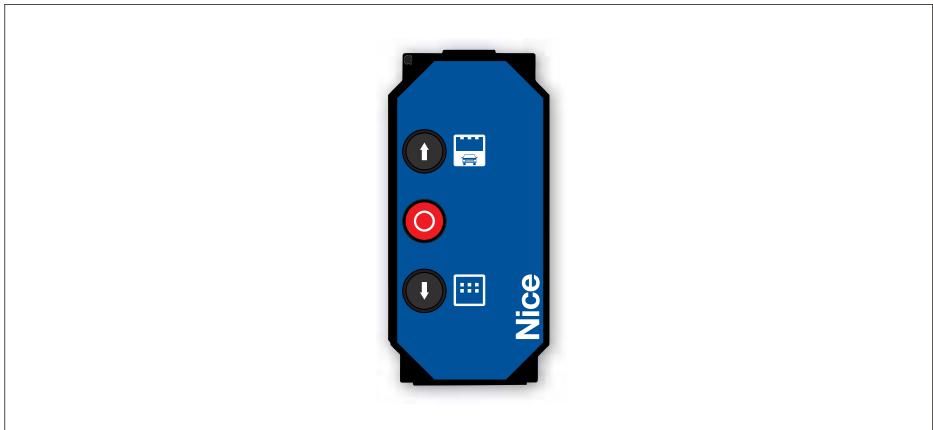
- Dedicated model for high speed doors, sold only in combination with the inverter inside the kit (see page 26).
- Automatic and deadman modes
 - Direction of rotation control
 - Operation with electronic switch
 - Connection of additional modules
 - Connection of OXI radio (optional)
 - Emergency stop switch (optional)
 - Connection of external control transmitters

Technical data

Type	UST1-FU
Power supply	1 x 230V AC 50Hz (10A protection) 3 x 400V AC 50Hz (16A protection)
Power at rest	< 4VA
Ambient temperature	from -20°C to +50°C
Control voltage	Additional delayed 0.8A fuse
Protection rating	IP 54 (IP 65 optional)
Dimensions	255 x 180 x 120 mm (HxWxD)

For operation with inverter.
For gearmotors up to 2.2kW - UST1-FU.
For gearmotors larger than 3 kW, with additional relay.

Nice UST2 control units



UST2 control unit with deadman mode. It is ideal for sectional doors and rolling shutters.

The UP and DOWN buttons on the cover are used to operate the door.

- Simplec ontrol
- Deadman mode
 - Direction of rotation control
 - Operation with mechanical limit switch
 - Connection of external control transmitters
 - Connection of OXI2 radio (optional)
 - Emergency stop switch (optional)

For gearmotors up to 2.2 kW - UST2.

Code	Description
NDCC0023	Station with EEC plug

Technical data

Type	UST2
Power supply	3 x 230 V / 400 V AC 50Hz (with 6 and/or 10 A fuses)
Max. motor power	2.2 kW
Motor connection - reverse contactor	2x3 NO relay contacts 400 V/max. 2.2 kVA
Ambient temperature	from -20°C to +50°C
Control voltage	24 Vdc Additional delayed 0.8 A fuse
Protection rating	IP 54 (IP 65 on request)
Dimensions	88 x 52 x 170 mm (WxDxH)

With a small modification, for the UST2 station it is possible to use the mechanical limit switch cables of the UST1 station or order dedicated cables. More information on request.

Nice UDL1 control units



UDL1 control unit with integrated phase control for loading ramps with extensible ends.

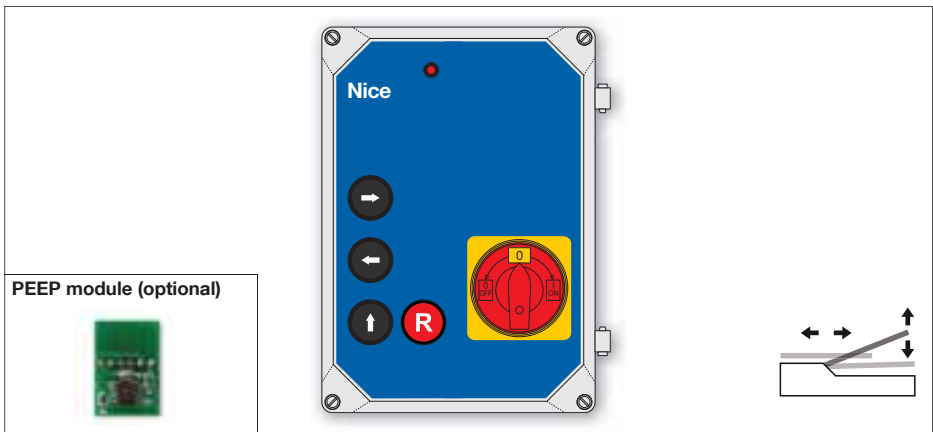
It is possible to connect a valve for loading ramp operation and a sensor for locking the ramp.

It is sufficient to push the "UP" button located on the control housing to operate the ramp.

Code	Description
NDCC0215	Control unit with EEC plug

Technical data	
Type	UDL1
Power supply	3x230V or 3x400V AC 50Hz, with internal switching with 3x6.3A T fuses
Power supply cable	5x1.5 mm ²
Power	Hydraulic motor ≤ 1.1 kW - Max. valve 24 W / 24 Vdc
Sensors	1 ramp locking sensor
Power at rest	< 5VA
Ambient temperature	from -20°C to +50°C
Protection rating	IP 54
Dimensions	255 x 120 x 180 mm (HxDxW)

Nice UDL2 control units



Nice UDL2 is a control unit for loading ramps with extensible and sliding ends, with operation with two or more valves (it is possible to connect up to 3 valves).

Ramp locking through the door control unit. Door locking through the ramp control unit. A wide range of connections.

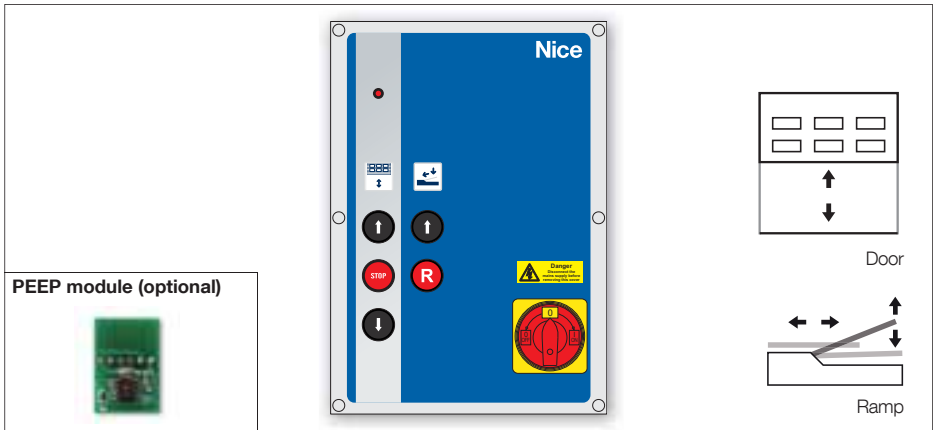
Cutting-edge echnology and simple control:

- Wheel wedge
- Vehicle detector
- External and internal traffic lights
- Docklight (floodlight)
- Horn
- Forced lowering
- Position sensor
- Preassembled PEEP customisation module (optional)
- Automatic and deadman modes
- Emergency stop switch
- Ramp locking sensor connection
- Direction of rotation control
- Three-phase control

Code	Description
NDCC0260	Control unit, without PEEP module, without plug

Technical data	
Type	UDL2
Power supply	3x230 V o 3x400 V AC 50 Hz, with internal switching with fuses 3x6.3A T
Power supply cable	5x 1.5mm ²
Power	Hydraulic motor ≤ 1.1 kW - Max. 3 valves 24 W / 24 Vdc
Sensors	4 sensors
Connection terminals	1.5 mm ² max.
Power at rest	< 5VA
Ambient temperature	from -20°C to +50°C
Protection rating	IP 54
Dimensions	255 x 120 x 180 mm (HxDxW)

Nice Combi-Control control units



Code	Description
NDCC0116	Combi Control control unit, with PEEP module, with EEC plug

Technical data

Type	UST1K-1.1kW
Voltage power supply	3 x 400V AC 50Hz (con 6 and/or 10 A fuses)
Max. motor power	1.1 kW
Motor connection	2x3 NO relay contacts 400V/max. 1.2 kVA
Power at rest	< 4VA
Ambient temperature	from -20°C to +50°C
Control voltage	24 Vdc Additional delayed 0.8 A fuse
Protection rating	IP 54 (IP 65 optional)
Dimensions	255 x 120 x 180 mm (HxWxD)

Nice Combi Control is a control unit for ramps with integrated door control. For doors and loading ramps with folding and sliding end, operation with two or more valves (it is possible to connect up to 3 valves).

A wide range of connections.

It internally combines the functions of:

- Door control unit **UST1-KL**
- Ramp control unit **UDL2**

In a single compact housing, a smart and automatic system for controlling your complete door and ramp systems.

UST1K-1.1kW control unit

Various connection possibilities

- Gearmotors up to 1.1 kW
- Automatic and deadman modes
- Safety elements (sensitive edge)
- Photoelectric barriers
- External and internal traffic lights
- Position sensor
- Safety switch for wicket door
- Radio (Nice Opera-OXI)
- External control transmitters
- Emergency stop switch
- Direction of rotation control
- Simple limit switch setting









Control unit for UDL2 ramps

Cutting-edget echnology:

- Wheel wedge
- Vehicle detector
- External and internal traffic lights
- Docklight (floodlight)
- Horn
- Forced lowering
- Position sensor
- Preamsembled PEEP customisation module (optional)
- Automatic and deadman modes
- Emergency stop switch
- Ramp locking sensor connection
- Direction of rotation control
- Three-phase control

Nice Additional modules

For control units for UST1 / UST1K / UST1-FU doors

	Model	Code	Description
	K1	711010000000	Additional module for the UST1 control unit for semiautomatic opening and closing in deadman mode. For gearmotors with mechanical limit switch.
	K1E	711010001000	Additional module for the UST1 control unit for semiautomatic opening and closing in deadman mode. For gearmotors with electronic limit switch.
	K2	711020000000	Additional module for the UST1 control unit for automatic closing after a programmable interval; possibility to connect optical or resistive sensitive edges (8.2 kΩ).
	K3	711030000000	Additional module for UST1, UST1K, UST1-FU series stations, with traffic lights function in both directions and an input for photoelectric barrier, pre-arranged for rolling shutters. For gearmotors with electronic limit switch.
	K3A	711030000010	Additional module for UST1, UST1K, UST1-FU series stations, with traffic lights function in both directions. For gearmotors with electronic limit switch.
	K4	711040000000	Additional module for UST1, UST1K, UST1-FU series stations, for management and electronic limit switch connection. Only in combination with the additional K2 module.
	K5	711050000000	Additional module for UST1, UST1K, UST1-FU series stations, with a wide range of service and parameterization functions. For gearmotors with electronic limit switch.
	K7-1K	711070000001	Without K3 module. Additional 1-channel module for UST1, UST1K, UST1-FU series stations - for induction coil connection. 12 - 24 Vdc.
		711070000031	With K3 module Additional 1-channel module for UST1, UST1K, UST1-FU series stations - for induction coil connection. 12 - 24 Vdc.
	K7-2K	711070000002	Without K3 module. Additional 2-channel module for UST1, UST1K, UST1-FU series stations - for induction coil connection. 12 - 24 Vdc.
		711070000032	With K3 module Additional 2-channel module for UST1, UST1K, UST1-FU series stations - for induction coil connection. 12 - 24 Vdc.

Nice Electrical accessories

SBA, automatic adjustment sensor of the lower limit switch position.
Only for electronic limit switch versions.

Smart: Patented solution that automatically changes the lower limit switch position in the case of flooring modifications or defective door closings due to wear or other reasons.

Precise: The new position is recorded in the control unit and reproduced upon the next door movement

Flexible: It operates combined with all Nice Industrial motors and UST1K, UST1-FU and UST1 control units (with additional K4 module).



Code	Description
920092000011	SBA sensor with connector block at fastening door with removable terminals



Code	Description
920091000010	Connector block fastened on the door, without board, with 16 mm front hole



Code	Description
920092000010	Connector block fastened on the door for sensitive edge (photocells) and spiral cable code 920081155516 connection, with 16 mm front hole



Code	Description
920092000020	Connector block fastened on the door for connecting safety devices protecting against possible cable breaks (for sectional doors)



Code	Description
920132111001	Pair of photocells with Ø 11.5 mm for optical sensitive edge, 11.5 to 22 mm adapter included. For doors up to 7 m of width (cables for connecting length of 10.5 m - 1 m)



Code	Description
920132112006	Pair of photocells with Ø 11.5 mm for optical sensitive edge, 11.5 to 22 mm adapter included. For doors up to 4.5 m of width (cables for connecting length of 6 m - 0.5 m)



Code	Description
920081155516	5-wire coupling spiral cable with extension from 0.8 to 1.6 m, for optical or sensitive edge connection



Code	Description
920811000010	Cylindrical safety switch to protect against possible cable breaks (for sectional doors)



Code	Description
920821000010	Safety switch to protect against possible cable breaks or slackening

Nice Mechanical accessories



Code	Description
900029000050	Additional chain for motors with chain release, 5 m length



Code	Description
911110317254	Adapter for coupling motors with 31.75 mm hole and Ø 25.4 mm shafts
911110400254	Adapter for coupling motors with 40 mm hole and Ø 25.4 mm shafts
911110400317	Adapter for coupling motors with 40 mm hole and Ø 31.75 mm shafts

Nice Station - gearmotor connection cables



Shielded connection cable between gearmotor and control unit with connector, for gearmotors with mechanical limit switches. Other lengths on request.

Code	Description
CA0046A00	Length 3 m
CA0047A00	Length 5 m
CA0048A00	Length 7 m
CA0049A00	Length 9 m
CA0050A00	Length 11 m

Shielded connection cable between gearmotor and control unit with connector, for gearmotors with electronic limit switches. Other lengths on request.

Code	Description
CA0040A00	Length 3 m
CA0041A00	Length 5 m
CA0042A00	Length 7 m
CA0043A00	Length 9 m
CA0044A00	Length 11 m

Non-shielded connection cable between gearmotor and control unit with connector, for gearmotors with electronic limit switches. Other lengths on request.

Code	Description
CA0034A00	Length 3 m
CA0035A00	Length 5 m
CA0036A00	Length 7 m
CA0037A00	Length 9 m
CA0038A00	Length 11 m



For complete automation

Control electronics and accessories

78 79	One Series transmitters and receivers
80	Moon Series of photocells
81	Wallyght multifunction light

Nice One Series transmitters and receivers



Portable transmitters with management of Identity Codes and Certificates, self-learning and integrated proximity receiver.

With 72-bit O-Code code, also compatible with the receivers having Nice FloR code (only for One with 433.92 MHz).

The **One system** includes transmitters with 1, 2, 4, 9 channels and pre-wired coupling receivers, with and without built-in transmitter.

Wide choice of models with:

- **433.92 MHz, Rolling Code** that use **AM amplitude modulation**. Also available in the versions with sequential code, multiple insertion (OneC).
- **868.46 MHz, Rolling Code** that use **FM frequency modulation**, less sensitive to interferences than with AM amplitude modulation, to ensure safer transmissions and decrease the response time of the automations.

Safe and evolved: it uses calculation and recognition systems that increase its safety level and reduces the response time of the automation by about 3 times.

With **built-in proximity receiver** that makes it possible - thanks to the exchange of **Identity Code** between two remote controls - to store a new transmitter using one of them already enabled in the receiver.

Insertion speed, without the need for connections via cable: thanks to the **Certificate management and O-Box interface**, it is possible to enable a One transmitter without going near the system, but by simply bringing it close up to the O-Box and starting the **procedure guided by PC or PDA**.

Ability to program the **identity codes and 9 certificates** of the receivers.

The **OneC version** makes it possible - through the O-Box software - to store entire 10 pc packs in a single operation, without even having to open them.

Practical and elegant, the One transmitter can be used as a refined and technological key case or fixed on the wall or to the car dashboard thanks to the handy support included in the packaging.

ON1 ON1C	ON2 ON2C	ON4 ON4C	ON9
ON1FM	ON2FM	ON4FM	ON9FM

Code	Description	Pc./pack.
ON1	1 channel, 433.92 MHz, graphite colour	10
ON1C	1 channel, 433.92 MHz, graphite colour, with sequential code, multiple insertion	10
ON2	2 channels, 433.92 MHz, graphite colour	10
ON2C	2 channels, 433.92 MHz, graphite colour, with sequential code, multiple insertion	10
ON4	4 channels, 433.92 MHz, graphite colour	10
ON4C	4 channels, 433.92 MHz, graphite colour, with sequential code, multiple insertion	10
ON9	9 channels, 433.92 MHz, graphite colour	10
ON1FM	1 channel, 868.46 MHz, white	10
ON2FM	2 channels, 868.46 MHz, white	10
ON4FM	4 channels, 868.46 MHz, white	10
ON9FM	9 channels, 868.46 MHz, white	10

Technical characteristics

	Carrier frequency	Estimated range	Code	Power supply	Battery duration	Protection rating	Dimensions Weight
ON_ , ON_C	433.92 MHz	200 m (to outside); 35 m (if inside buildings)*	O-Code 72 bit; rolling code	3 Vdc; lithium battery type CR2032	2 years (with 10 transmissions per day)	IP40 (use in protected environments)	44x55x10 h mm 11 g
ON_FM	868.46 MHz						

* The range of the transmitters and the reception capability of the receivers could be influenced by any devices operating in the area with same frequency.

The complete line of multicode receivers with management of the Identity Codes and Certificates.

Coupling, pre-wired, with and without built-in transmitter.

Available in the versions with:

- 433.92 MHz;
- 868.46 MHz.

Each receiver of the One series has its own **secret identification** number called **Certificate** that distinguishes it from any other. The Certificate can also be programmed on the One transmitter as an enabling code for interacting with the receiver.

Convenience and practicality: the presence of the transmitter inside the OXIT/OXITFM and OX2T/OX2TFM receivers provides **two-way communication with the multifunction O-Box interface**; this makes it possible to perform operations such as downloading radio codes, and managing certificates and passwords directly on the receiver, even when it is in position and hard to reach.

3 protection levels via password.

Internal transmitter:

the OXIT/OXITFM and OX2T/OX2TFM receivers can be used as signal repeaters, increasing the operation distance between transmitters and other receivers of the One series. The new One receivers also can be interfaced with PC and PDA so programming the certificates is quick and simple using O-Box.

3 programming modes.

Extreme flexibility: they store up to 1024 Mode I transmitters.

Multicode:

the One series receivers are compatible with the transmitters with O-Code One codes at 868.46 MHz and 433.92 MHz and Smilo, Flo, FloR, TTS codes (only for One at 433.92 MHz) for multigroup transmission that allows you to send multiple simultaneous commands from a single transmitter.

Receivers

433.92 MHz, coupling

Code	Description	Pc./pack.
OXI	4 channels, without built-in transmitter	1
OXIT	4 channels, with built-in transmitter	1

868.46 MHz, coupling

Code	Description	Pc./pack.
OXIFM	4 channels, without built-in transmitter	1
OXITFM	4 channels, with built-in transmitter	1

433.92 MHz, pre-wired

Code	Description	Pc./pack.
OX2	2 channels, without built-in transmitter	1
OX2T	2 channels, with built-in transmitter	1

868.46 MHz, pre-wired

Code	Description	Pc./pack.
OX2FM	2 channels, without built-in transmitter	1
OX2TFM	2 channels, with built-in transmitter	1

Technical characteristics

	Reception frequency	Transmission frequency	Input impedance	Sensitivity	Decoding	Number of channels	Relay contact	Power supply	Electrical input	Protection rating	Dimensions Weight	
OXI	433.92 MHz	-	52 Ohm	>0.5 μ V for successful signal	O-Code, Smilo, FloR, Flo, TTS	4 (15 on BUS T4)	-	5 Vdc	30 mA (max)	IP 30	50x19x45 h mm, 20 g	
OXIT		433.92 MHz				2	max 0.5 A 50 V (NA)	from 12 to 28 Vdc/Vac	80 mA (max) with enabled relays		58x86x22 h mm, 55 g	
OX2		-										
OX2T		433.92 MHz										
OXIFM	868.46 MHz	-	52 Ohm	>0.8 μ V for successful signal	O-Code	4 (15 on BUS T4)	-	5 Vdc	30 mA (max)	IP 30	50x19x45 h mm, 20 g	
OXITFM		868.46 MHz				2	max 0.5 A 50 V (NA)	from 12 to 28 Vdc/Vac	100 mA (max) with enabled relays		58x86x22 h mm, 55 g	
OX2FM		-										
OX2TFM		868.46 MHz										

Nice Moon Series of photocells



Synchronised photocells with 10° (MOF) receiving angle, also in the version that can be adjusted 30° in every direction (MOFO).

Extra thin:
only 28 mm (38 mm in the adjustable version).

Very sturdy:
body in transparent polycarbonate.

2 range levels.

Synchronism circuit.

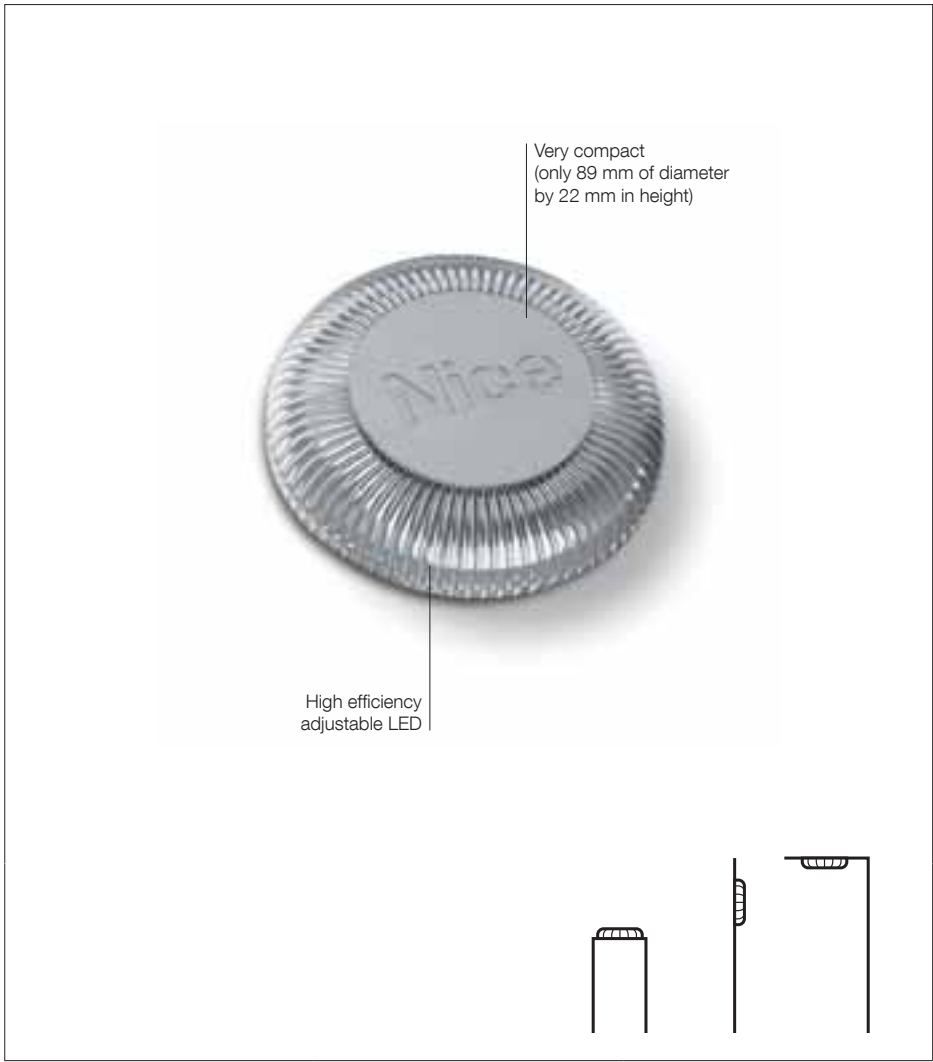
Alignment with proportional LED for easy and safe installation.

Code	Description	Pc./Pack.
MOF	Pair of outdoor photocells	1
MOFO	Pair of outdoor photocells, adjustable 30°	1

Technical characteristics

	Estimated range (m)	Power supply	Electrical input (mA)	Protection rating (IP)	Operating temperature (°C Min/Max)	Relay range	Dimensions (mm)	Weight (g)
MOF	15 (30 with jumper + "10" cut)	without jumper 24 Vac/Vdc limits: 18-35 Vdc, 15-28 Vac with jumper 12 Vac/Vdc limits: 10-18 Vdc, 9-15 Vac	25 RX, 30 TX	54	-20 ÷ +55	max 500 mA and 48 V	69x25x78 h	55
MOFO							69x37x78 h	80

Nice Wallyght multifunction light



LED multifunction light.

Single version with power supply 12/24 Vac/Vdc with flashing, courtesy or twilight light function.

A new idea for a lot more safety: connected to the compatible stations, Wallyght can operate as a normal flashing light or to illuminate all around as a fixed courtesy light. Connected to a 12/24 Vac/Vdc output, Wallyght can always remain on, and also switch on at sunset and switch off at dawn by enabling the integrated dusk sensor.

Great efficiency, high duration: the two 1 W LEDs have a duration of 70,000 hours (continuous use).

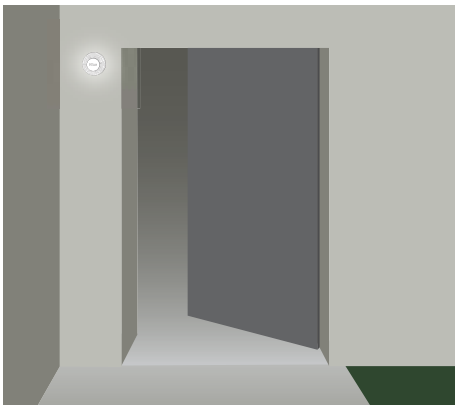
Horizontal, wall or ceiling mounting: together with the possibility of directing the beam of light and the compactness of the IP44 box, it makes using the Wallyght even more flexible.

Code	Description	Pc./Pack.
WLT	Multifunction warning light	1

Driveway lights



Courtesy light



Nice SpA

Oderzo TV Italia
Ph. +39.0422.85.38.38
Fax +39.0422.85.35.85
info@niceforyou.com

Find out more about Nice
products and services on the website:
www.niceforyou.com



Home Automation