

Rotatory Switch-Disconnecter

Ex9I HV AC



- Switch-Disconnecter designed solely for insulation and load breaking electrical circuits
- Frame sizes 250, 630
- Rated operating current up to 630 A
- 3 and 4-pole versions
- Rated short circuit making capacity
 $I_{cm} 17 \text{ kA}$
- Rated voltage 1140 V AC maximum rated current of 630A

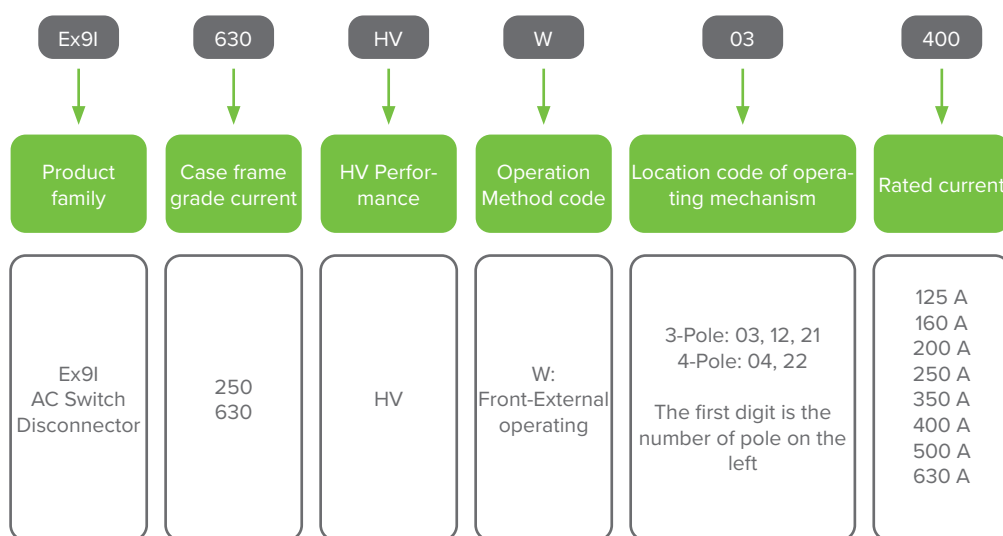
Ex9I 250–630 HV Series Switch-Disconnecter is designed solely for isolation and load breaking electrical circuits of AC 50Hz/60Hz electrical systems with maximum rated working voltage AC 1140V.

These series can be used as supporting product in the energy storage industry, such as battery clusters and converters, the product provides infrequent manual making and breaking and power isolation function.

Compliance with Standard:

IEC 60947-3

Type Key

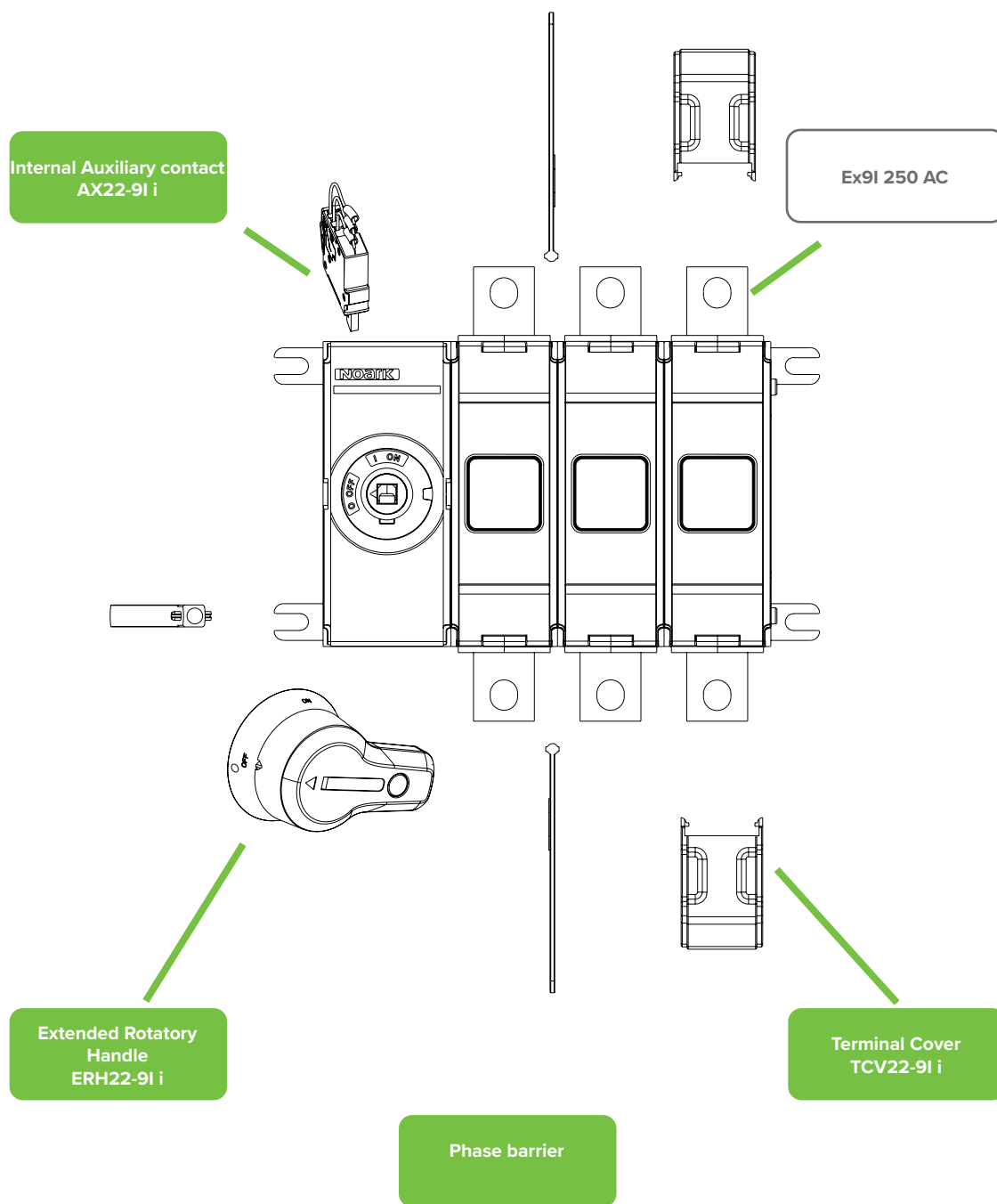


Certification marks



Rotatory Switch-Disconnecter **Ex9I AC**

Ex9I 250 HV AC Internal-External accessories



Internal auxiliary contact AX22-9I i

Terminal cover TCV22-9I i

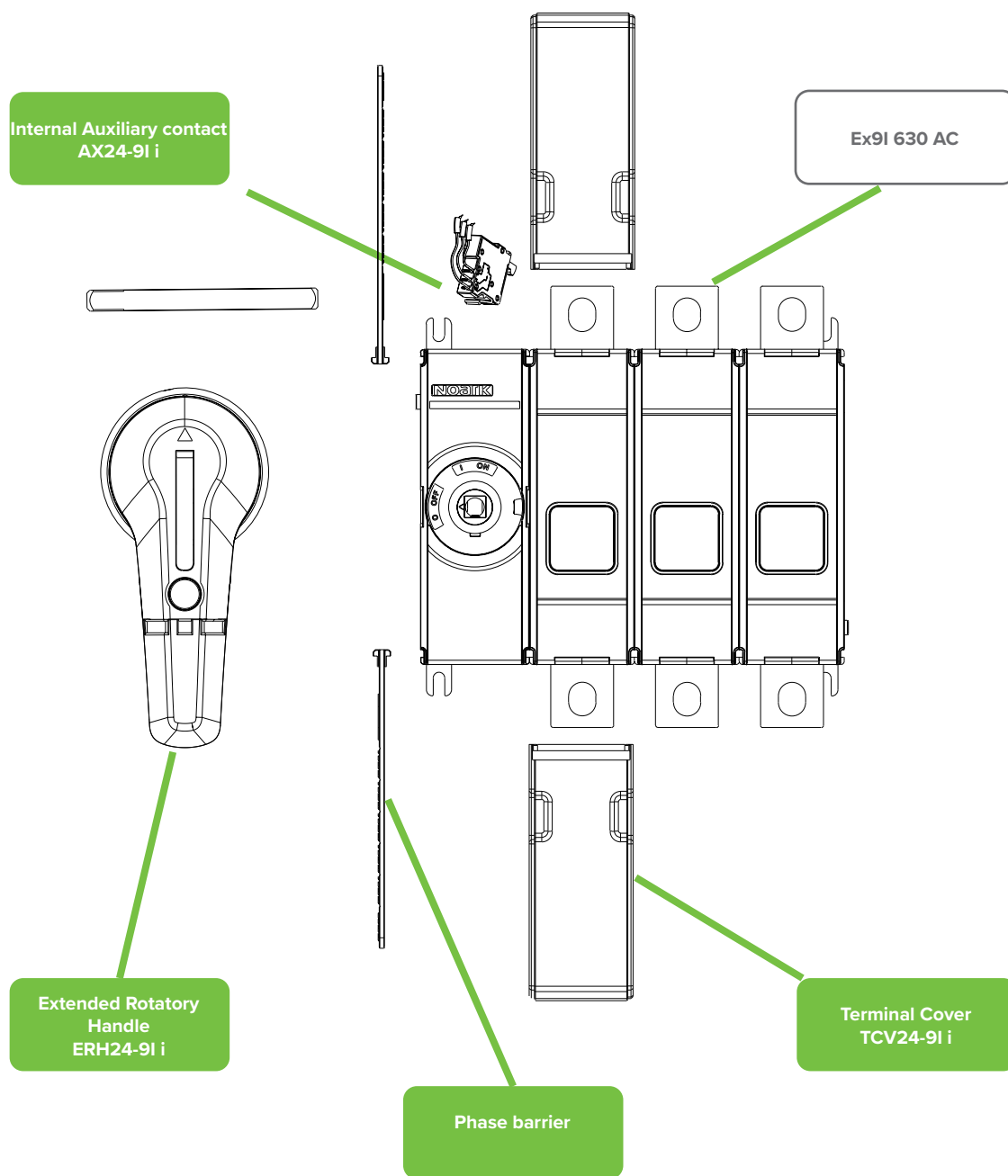
Extended rotatory handle ERH22-9I i (This accessory must be ordered separately to operate the Ex9I)

Phase barrier

Mounting screws, screw type terminals as well as phase barriers in the scope of delivery

Rotatory Switch-Disconnecter **Ex9I AC**

Ex9I 630 HV AC Internal-External accessories



Internal auxiliary contact AX24-9I i

Terminal cover TCV24-9I i

Extended rotatory handle ERH24-9I i (This accessory must be ordered separately to operate the Ex9I)

Phase barrier

Mounting screws, screw type terminals as well as phase barriers in the scope of delivery

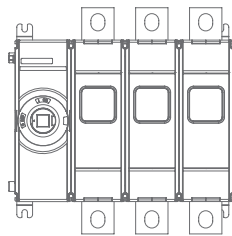
Rotatory Switch-Disconnecter **Ex9I 250 AC**

Version Ex9I 3-pole up to 250 A

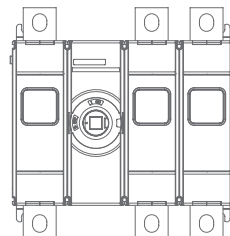


Rated Current	Poles	Setup	Article No.	Type	Packing
125A	3	3P Right	114694	Ex9I-250HV W03 125A EU	1/6
160A	3	3P Right	114701	Ex9I-250HV W03 160A EU	1/6
200A	3	3P Right	114708	Ex9I-250HV W03 200A EU	1/6
250A	3	3P Right	114715	Ex9I-250HV W03 250A EU	1/6
125A	3	1P Left, 2P Right	114696	Ex9I-250HV W12 125A EU	1/6
160A	3	1P Left, 2P Right	114703	Ex9I-250HV W12 160A EU	1/6
200A	3	1P Left, 2P Right	114710	Ex9I-250HV W12 200A EU	1/6
250A	3	1P Left, 2P Right	114717	Ex9I-250HV W12 250A EU	1/6
125A	3	2P Left, 1P Right	114697	Ex9I-250HV W21 125A EU	1/6
160A	3	2P Left, 1P Right	114704	Ex9I-250HV W21 160A EU	1/6
200A	3	2P Left, 1P Right	114711	Ex9I-250HV W21 200A EU	1/6
250A	3	2P Left, 1P Right	114718	Ex9I-250HV W21 250A EU	1/6

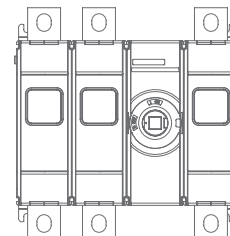
Setup



3P Right



1P Left, 2P Right



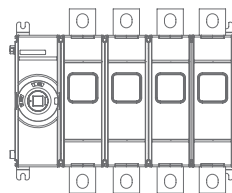
2P Left, 1P Right

Version Ex9I 4-pole up to 250 A

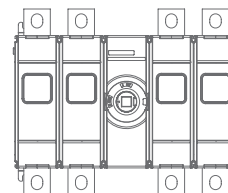


Rated Current	Poles	Setup	Article No.	Type	Packing
125A	4	4P Right	114698	Ex9I-250HV W04 125A EU	1/8
160A	4	4P Right	114705	Ex9I-250HV W04 160A EU	1/8
200A	4	4P Right	114712	Ex9I-250HV W04 200A EU	1/8
250A	4	4P Right	114719	Ex9I-250HV W04 250A EU	1/8
125A	4	2P Left, 2P Right	114699	Ex9I-250HV W22 125A EU	1/8
160A	4	2P Left, 2P Right	114706	Ex9I-250HV W22 160A EU	1/8
200A	4	2P Left, 2P Right	114713	Ex9I-250HV W22 200A EU	1/8
250A	4	2P Left, 2P Right	114720	Ex9I-250HV W22 250A EU	1/8

Setup



4P Right



2P Left, 2P Right

Accessories Ex9I 250

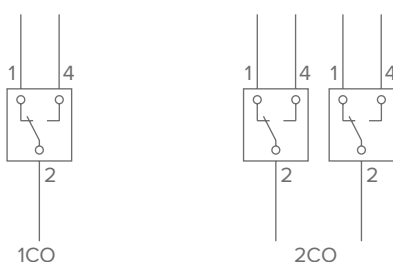
Internal Auxiliary contacts

- Internal auxiliary contacts, 1 or 2 change over
- Mounting into the Ex9I 250
- To indicate the item status – ON/OFF position



Contacts	Suitable for	Article No.	Type	Packing
1CO	Ex9I 250	114792	AX22-9I 11 EU	8/192
2CO	Ex9I 250	114793	AX22-9I 22 EU	4/96

Wiring diagrams



Terminal cover

- To insulate the main terminals
- 3-pole: 6 optional
- 4-pole: 8 optional



Suitable for	Article No.	Type	Packing
Ex9I 250	114798	TCV22-9I EU	4/48

Extended rotatory handle

- Three different sizes
- Front and side mounting method
- Accessory to be ordered separately with the item



Size	Suitable for	Article No.	Type	Packing
200mm	Ex9I 250	114803	ERH22-9I 200 EU	1/18
320mm	Ex9I 250	114804	ERH22-9I 320 EU	1/18
500mm	Ex9I 250	114805	ERH22-9I 500 EU	1/18

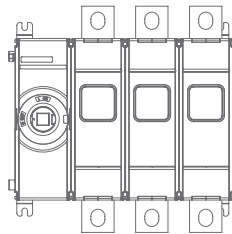
Rotatory Switch-Disconnecter **Ex9I 630 AC**

Version Ex9I 3-pole up to 630 A

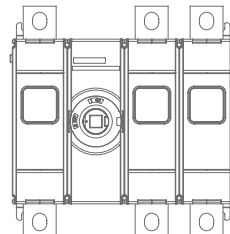


Rated Current	Poles	Setup	Article No.	Type	Packing
350A	3	3P Right	114722	Ex9I-630HV W03 350A EU	1/2
400A	3	3P Right	114729	Ex9I-630HV W03 400A EU	1/2
500A	3	3P Right	114736	Ex9I-630HV W03 500A EU	1/2
630A	3	3P Right	114743	Ex9I-630HV W03 630A EU	1/2
350A	3	1P Left, 2P Right	114724	Ex9I-630HV W12 350 EU	1/2
400A	3	1P Left, 2P Right	114731	Ex9I-630HV W12 400A EU	1/2
500A	3	1P Left, 2P Right	114738	Ex9I-630HV W12 500A EU	1/2
630A	3	1P Left, 2P Right	114745	Ex9I-630HV W12 630A EU	1/2
350A	3	2P Left, 1P Right	114725	Ex9I-630HV W21 350A EU	1/2
400A	3	2P Left, 1P Right	114732	Ex9I-630HV W21 400A EU	1/2
500A	3	2P Left, 1P Right	114739	Ex9I-630HV W21 500A EU	1/2
630A	3	2P Left, 1P Right	114746	Ex9I-630HV W21 630A EU	1/2

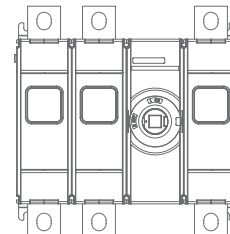
Setup



3P Right



1P Left, 2P Right



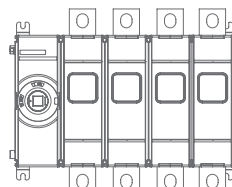
2P Left, 1P Right

Version Ex9I 4-pole up to 630 A

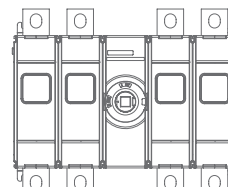


Rated Current	Poles	Setup	Article No.	Type	Packing
350A	4	4P Right	114726	Ex9I-630HV W04 350A EU	1/2
400A	4	4P Right	114733	Ex9I-630HV W04 400A EU	1/2
500A	4	4P Right	114740	Ex9I-630HV W04 500A EU	1/2
630A	4	4P Right	114747	Ex9I-630HV W04 630A EU	1/2
350A	4	2P Left, 2P Right	114727	Ex9I-630HV W22 350A EU	1/2
400A	4	2P Left, 2P Right	114734	Ex9I-630HV W22 400A EU	1/2
500A	4	2P Left, 2P Right	114741	Ex9I-630HV W22 500A EU	1/2
630A	4	2P Left, 2P Right	114748	Ex9I-630HV W22 630A EU	1/2

Setup



4P Right



2P Left, 2P Right

Accessories Ex9I 630

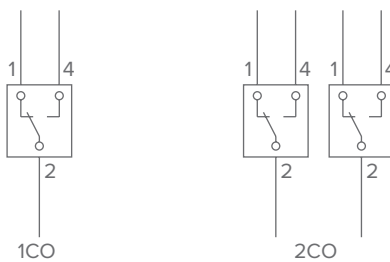
Internal Auxiliary contacts

- Internal auxiliary contacts, 1 or 2 change over
- Mounting into the Ex9I 630
- To indicate the item status – ON/OFF position



Contacts	Suitable for	Article No.	Type	Packing
1CO	Ex9I 630	114796	AX24-9I 11 EU	8/192
2CO	Ex9I 630	114797	AX24-9I 22 EU	4/96

Wiring diagrams



Terminal cover

- To insulate the main terminals
- 3-pole: 6 optional
- 4-pole: 8 optional



Suitable for	Article No.	Type	Packing
Ex9I 630	114799	TCV24-9I EU	4/48

Extended rotatory handle

- Three different sizes
- Front and side mounting method
- Accessory to be ordered separately with the item



Size	Suitable for	Article No.	Type	Packing
200mm	Ex9I 630	114800	ERH24-9I 200 EU	1/18
320mm	Ex9I 630	114801	ERH24-9I 320 EU	1/18
500mm	Ex9I 630	114802	ERH24-9I 500 EU	1/18

Technical Data **Ex9I 250 HV AC**

Ex9I Rotatory Switch-Disconnecter up to 250A

General parameters

Suitable for commercial as well as industrial applications		
Protection degree of the product: IP20		
Pollution Class of the Surrounding Environment: Class 3		
Internal accessories		
Internal auxiliary contact block	AX22-9I 11	114792
Internal auxiliary contact block	AX22-9I 22	114793
Max. number of installed internal accessories is 1 pcs of AX22-9I 11, or 1 pc of AX22-9I 22		
External accessories		
Extended rotary handle	ERH22-9I 200	114803
Extended rotary handle	ERH22-9I 320	114804
Extended rotary handle	ERH22-9I 500	114805
Terminal cover for 1 pole	TCV22-9I	114798
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Electrical parameters

Rated Current (A)		125	160	200	250
Tested according to		IEC/EN 60947-2			
Rated op. voltage U_e		415/ 690/ 800/1000/1140 AC			
Rated insulation voltage U_i		1 500 V			
Rated impulse withstand voltage U_{imp}		12 kV			
Rated frequency		50/60 HZ			
Short-time (50ms) withstand current I_{cw}		10 kA			
Rated making (Peak) current I_{cm}		17 kA			
Poles		3P / 4P			
Electrical service life		200 operation cycles			
Mechanical service life		8000 operation cycles			
Utilization category		Rated current (A)			
AC	AC 415~1140V	125	160	200	250
21A/22A	AC 415~1140V	125	160	200	250
AC-23A	AC 415~690V	125	160	200	250
AC-23A	AC 800V	125	160	160	160
AC-23A	AC 1140V	125	125	125	125
Line voltage connection		arbitrary above or below			

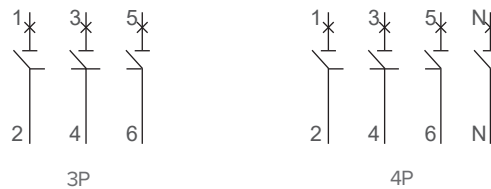
Mechanical parameters

Mounting	onto panel
Degree of protection	IP20, IP65 external handle
Terminals	plate
Min. Cross/sectional Area of Copper cable (mm ²)	50mm ² x 1 (Piece)
Max. Cross/sectional Area of Copper cable (mm ²)	185mm ² x 1 (Piece)
Maximum cooper bus-bar Width(mm)	/
Fastening torque of terminals	15—22 Nm
Ambient temperature	Derating capacity for use within 85°C
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average
Pollution degree	3

Technical Data **Ex9I 250 HV AC**

Ex9I Rotatory Switch-Disconnecter up to 250A

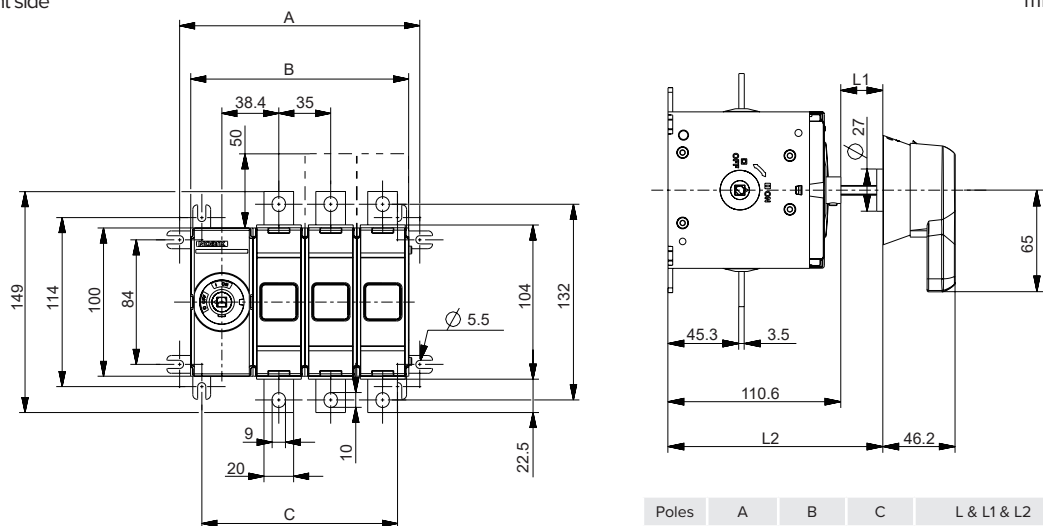
Wiring diagram



Dimensions

Mechanism on front side

mm

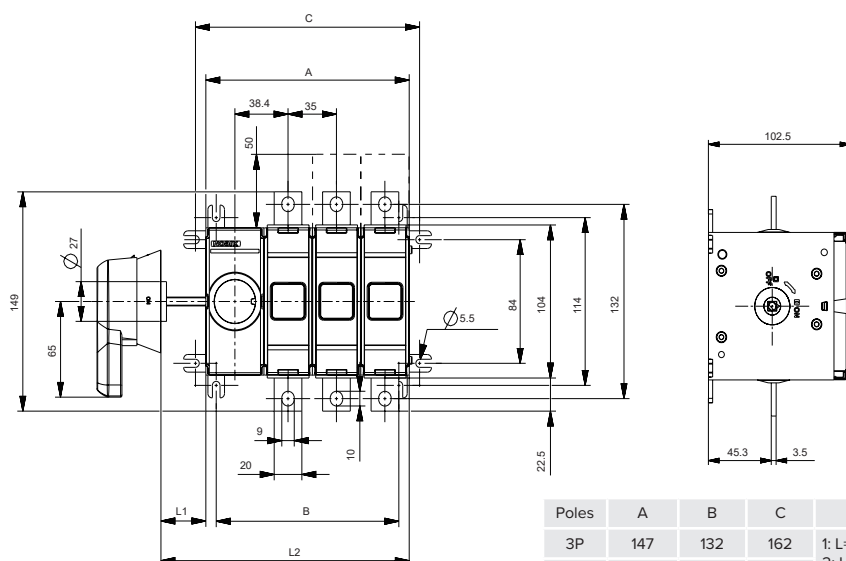


Poles	A	B	C	L & L1 & L2
3P	162	147	132	1: L= 77 - 400 2: L1= 27 - 350
4P	197	182	167	3: L2= 137.5 - 460.5

Dimensions

Mechanism on one side

mm



Poles	A	B	C	L & L1 & L2
3P	147	132	162	1: L= 77 - 400 2: L1= 32.5 - 355.5
4P	182	167	197	3: L2= 144.5 - 467.5

Technical Data **Ex9I 630 HV AC**

Ex9I Rotatory Switch-Disconnecter up to 630A

General parameters

Suitable for commercial as well as industrial applications		
Protection degree of the product: IP20		
Pollution Class of the Surrounding Environment: Class 3		
Internal accessories		
Internal auxiliary contact block	AX24-9I 11	114796
Internal auxiliary contact block	AX24-9I 22	114797
Max. number of installed internal accessories is 1 pcs of AX24-9I 11, or 1 pc of AX24-9I 22		
External accessories		
Extended rotary handle	ERH24-9I 200	114800
Extended rotary handle	ERH24-9I 320	114801
Extended rotary handle	ERH24-9I 500	114802
Terminal cover for 1 pole	TCV24-9I	114799
Mounting screws, screw type terminals as well as phase barriers in the scope of delivery		

Electrical parameters

Rated Current (A)		350	400	500	630
Tested according to		IEC/EN 60947-2			
Rated op. voltage U _e		415/ 690/ 800/1000/1140 AC			
Rated insulation voltage U _i		1 500 V			
Rated impulse withstand voltage U _{imp}		12 kV			
Rated frequency		50/60 HZ			
Short-time (1s) withstand current I _{cw}		10 kA			
Rated making (Peak) current I _{cm}		17 kA			
Poles		3P / 4P			
Electrical service life		200 operation cycles			
Mechanical service life		5000 operation cycles			
Utilization category:		Rated current (A)			
AC	AC 415~1140V	350	400	500	630
21A/22A	AC 415~1140V	350	400	500	630
AC-23A	AC 415~690	350	400	500	630
AC-23A	AC 800V	350	400	400	400
AC-23A	AC 1140V	350	350	350	350
Line voltage connection		arbitrary above or below			

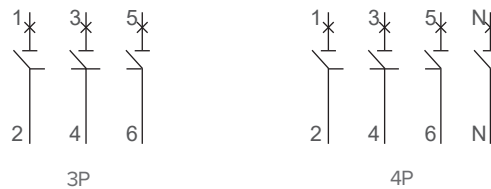
Mechanical parameters

Mounting	onto panel	
Degree of protection	IP20, IP65 external handle	
Terminals	plate	
Min. Cross/sectional Area of Copper cable (mm ²)	50mm ² x 1 (Piece)	120mm ² x1 (Piece)
Max. Cross/sectional Area of Copper cable (mm ²)	185mm ² x 1 (Piece)	185mm ² x1 (Piece)
Maximum cooper bus-bar Width(mm)	/	40mm×5mm×2 (Piece)
Fastening torque of terminals	15—22 Nm	30—44 Nm
Ambient temperature	Derating capacity for use within 85°C	
Relative humidity	≤ 50 % at 40 °C, ≤ 90 % monthly average	
Pollution degree	3	

Technical Data **Ex9I 630 HV AC**

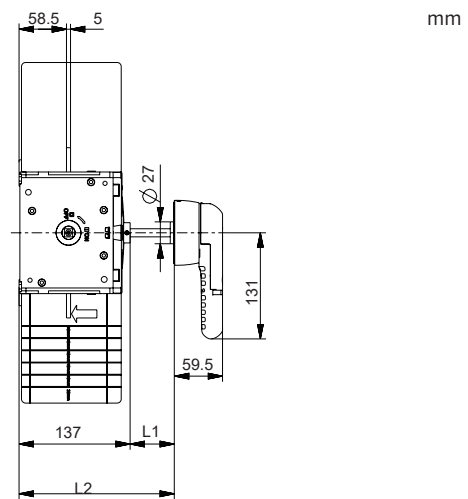
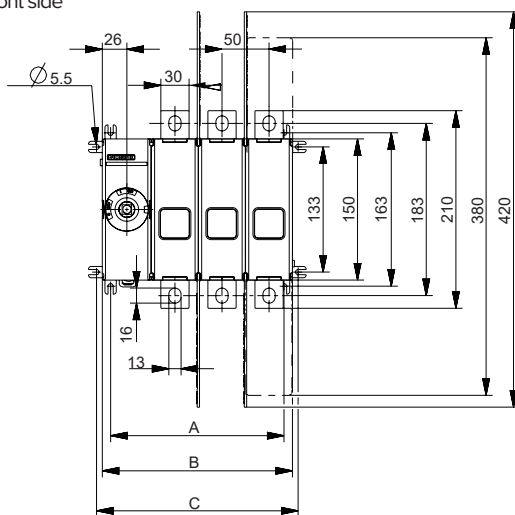
Ex9I Rotatory Switch-Disconnecter up to 630A

Wiring diagram



Dimensions

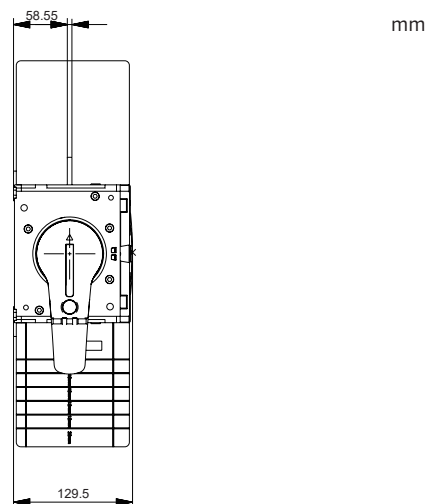
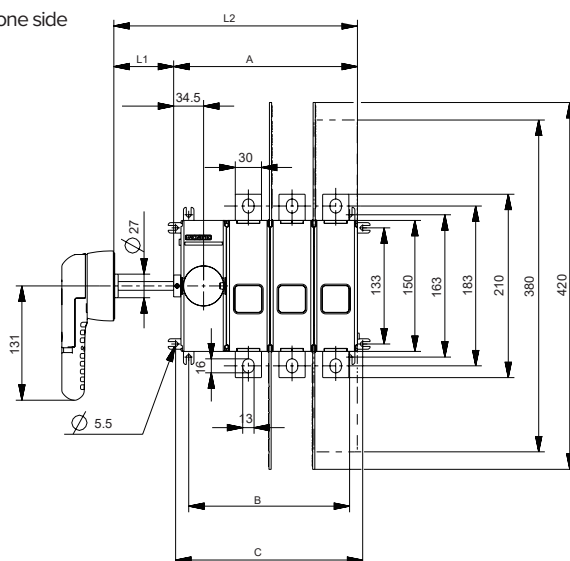
Mechanism on front side



Poles	A	B	C	L & L1 & L2
3P	184.2	202	214.2	1: L= 88 - 500 2: L1= 32.5 - 444.5
4P	234.2	252	254.2	3: L2= 169.5 - 581.5

Dimensions

Mechanism on one side



Poles	A	B	C	L & L1 & L2
3P	210.5	184.2	214.2	1: L= 88 - 500 2: L1= 46.5 - 458.5
4P	260.5	234.2	254.2	3: L2= 257 - 669