

# 70 RT HP

## ROTARY ISOLATOR SWITCHES IN INSULATING BOX

Rotary isolator switches in control (with black knob) or emergency version (with red knob). Complying with EN 60947-3 standard.

### Electrical data 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

Rated current IEC			16A	25A	32A	40A	63A	80A	100A	125A	160A	
Rated insulation voltage Ui		VAC	690	690	690	690	690	690	1000	1000	1000	
Rated impulse withstand voltage Uimp		kV	4	4	4	4	4	4	8	8	8	
Thermal current Ith/Ithe		A	16	25	32	40	63	80	100	125	160	
Rated operational current IEC	AC21A Resistive loads, including moderate overloads	415V	A	16	25	32	40	63	80	100	125	160
	AC22A Mixed resistive and inductive loads, including moderate overloads	415V	A	16	25	32	40	63	80	100	125	125
	AC23A Switching of motor loads or other highly inductive loads (3 phases/3 poles)	415V	A	16	25	32	40	63	80	100	125	125
Rated short time withstand current Icw (1s)		A	160	250	320	400	630	800	2500	2500	2500	
Conditional short circuit current (Icc)		415V 500V	kA	10	10	10	10	6	6	10	10	10
Associated fuse for conditional short circuit current - Type gG		A	16	25	32	40	63	80	100	125	160	
<b>WIRING *</b>												
Tightening torque		Nm	1				3		6			
Max. flexible wire		mm <sup>2</sup>	1 ÷ 10				2,5 ÷ 25		4 ÷ 70			
Max. rigid wire		mm <sup>2</sup>	1 ÷ 10				2,5 ÷ 25		4 ÷ 70			

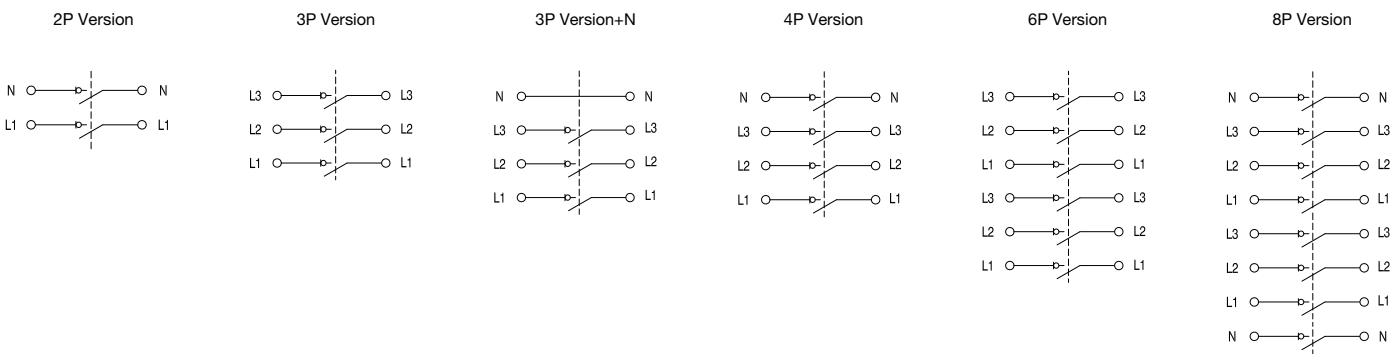
\* The surface of the wiring terminals is knurled to improve the grip of the stripped cable inserted into the terminal and to facilitate wiring operations.

### Electrical data 16 A ÷ 100 A 6P, 8P

Rated current IEC			16A	25A	32A	40A	63A	100A	
Rated insulation voltage Ui		VAC	1000	1000	1000	1000	1000	1000	
Rated impulse withstand voltage Uimp		kV	8	8	8	8	8	8	
Thermal current Ith/Ithe		A	16	25	32	40	63	100	
Rated operational current IEC	AC21A Resistive loads, including moderate overloads	415V	A	16	25	32	40	63	100
	AC22A Mixed resistive and inductive loads, including moderate overloads	415V	A	16	25	32	40	63	100
	AC23A Switching of motor loads or other highly inductive loads (3 phases/3 poles)	415V	A	16	25	32	40	63	100
Conditional short circuit current (Icc)		415V	kA	10	10	10	10	10	10
Associated fuse for conditional short circuit current - Type gG		A	40	40	40	40	100	100	
<b>WIRING *</b>									
Tightening torque		Nm	2				6		
Max. flexible wire		mm <sup>2</sup>	0,75 ÷ 16				4 ÷ 70		
Max. rigid wire		mm <sup>2</sup>	0,75 ÷ 16				4 ÷ 70		

\* The surface of the wiring terminals is knurled to improve the grip of the stripped cable inserted into the terminal and to facilitate wiring operations.



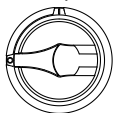
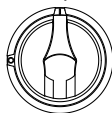
## Wiring diagram



### BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited resistance	Resistant	Not resistant	Limited resistance	Limited resistance	Not resistant	Not resistant	Limited resistance	Resistant	Resistant

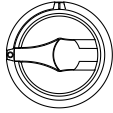
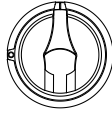
## Mechanical data 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

In (A)		16	25	32	40	63	80	100	125	160
Poles	2P	x	x	x	x					
	3P	x	x	x	x	x	x	x	x	x
	3P+N	x	x	x	x	x	x	x	x	x
	4P	x	x	x	x	x	x	x	x	x
Degree of protection		IP66/IP67/IP69								
Impact resistance		IK08								
Protection against indirect contact		□								
Thermo-pressure with ball (°C)		125 (device); 80 (box)								
Glow Wire Test (°C)		960 (device); 650 (box)								
Range of temperature (°C)		-25; +60								
Housable auxiliary contacts		Max. 2 (1 per side)						Max. 4* (2 per side)		
Holes entry	Upper sides	2 x M20/M25			2 x M25/M32		-			
	Lower sides	2 x M20/M25			2 x M25/M32		-			
Knob position	Open - OFF position		Close - ON position				Open - OFF position		Close - ON position	
										

**NOTE:** to install the boxes by drilling the internal fixing points, it is necessary to use the screw caps GW 44 622 or GW 44 623 to maintain the double insulation and the IP protection degree.

(\*) In 4P versions the max number of auxiliary contacts that can be installed is 3 (2+1). In the 160A 4P version the maximum number of auxiliary contacts that can be installed is 1.

## Mechanical data 16 A ÷ 100 A 6P, 8P

In (A)		16	25	32	40	63	100
Poles	6P	x	x	x	x	x	x
	8P	x	x	x	x	x	x
Degree of protection		IP66/67/69				IP66/69	
Impact resistance		IK08					
Protection against indirect contact		□					
Thermo-pressure with ball (°C)		125 (device); 80 (box)					
Glow Wire Test (°C)		960 (device); 650 (box)					
Range of temperature (°C)		-25; +60					
Housable auxiliary contacts	6P	Max. 4 (2 per side)				Max. 1	
	8P	Max. 1				Max. 2 (1 per side)	
Holes entry	Upper sides	2 x M20	2 x M25	2 x M25	2 x M32	-	
	Lower sides	2 x M20	2 x M25	2 x M25	2 x M32	-	
Knob position	Open - OFF position		Close - ON position				
							

**NOTE:** to install the boxes by drilling the internal fixing points, it is necessary to use the screw caps GW 44 622 or GW 44 623 to maintain the double insulation and the IP protection degree.

## Auxiliary Contacts

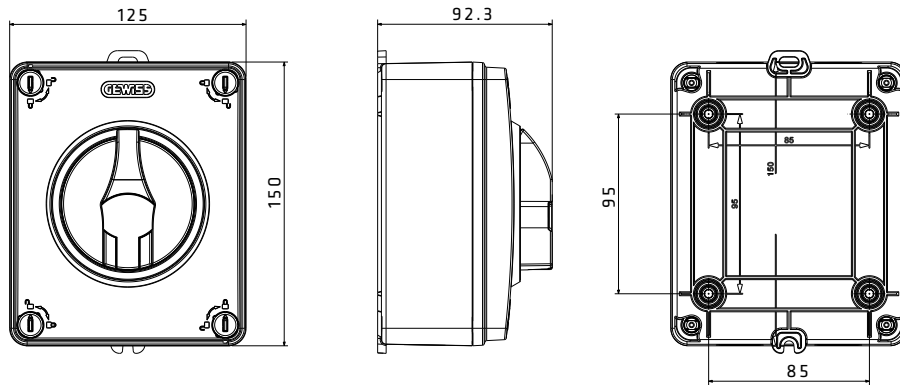
TECHNICAL DATA	
Type: Auxiliary Contacts NO or NC	Thermal current in Air (Ith): 16 A
Rated insulation voltage (Ui): 400 V	Thermal current in Boxes (Ithe): 10A
Conditional short circuit current (Icc - 400 V): 1 kA	Rated impulse withstand voltage (Uimp): 4 kV
Associated fuse size for conditional short circuit current - Type gG: 6A	Category of uses AC15: 6A (230V)
Tightening torque: 0,8 Nm	3A (380V)

# 70 RT HP

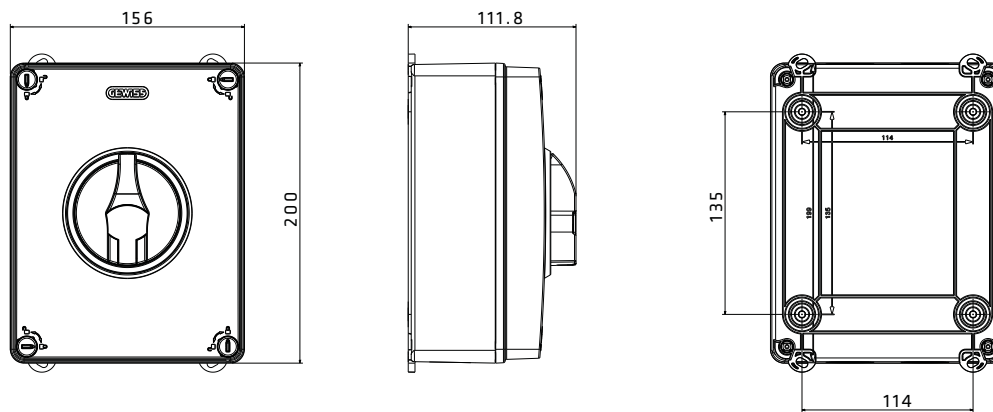
## Dimension tables 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

### ISOLATORS IN PLASTIC BOX

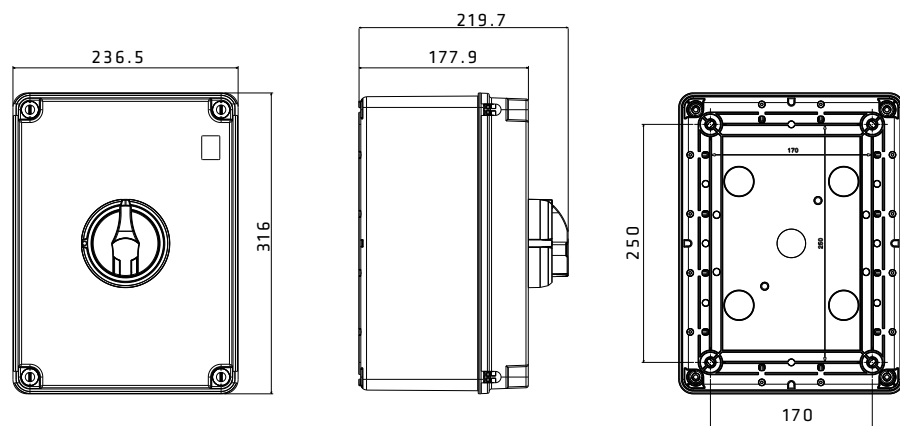
#### ISOLATORS IN BOX 16 A ÷ 40 A



#### ISOLATORS IN BOX 63 A - 80 A



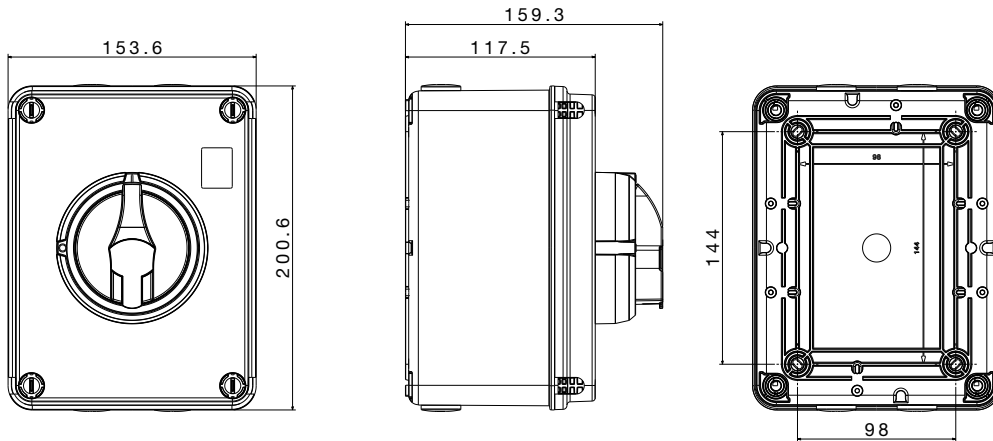
#### ISOLATORS IN BOX 100 A ÷ 160 A



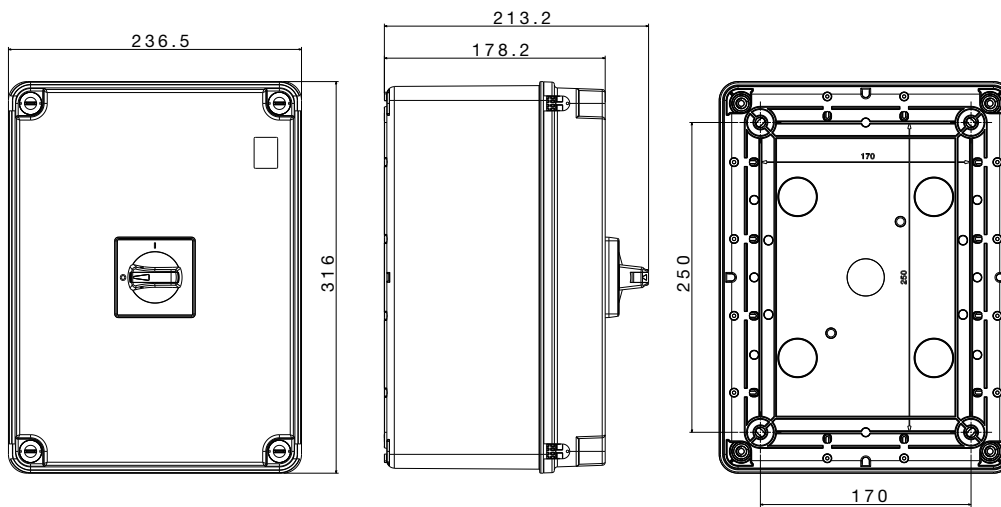
**Dimension tables 16 A ÷ 100 A 6P, 8P**

**ISOLATORS IN PLASTIC BOX**

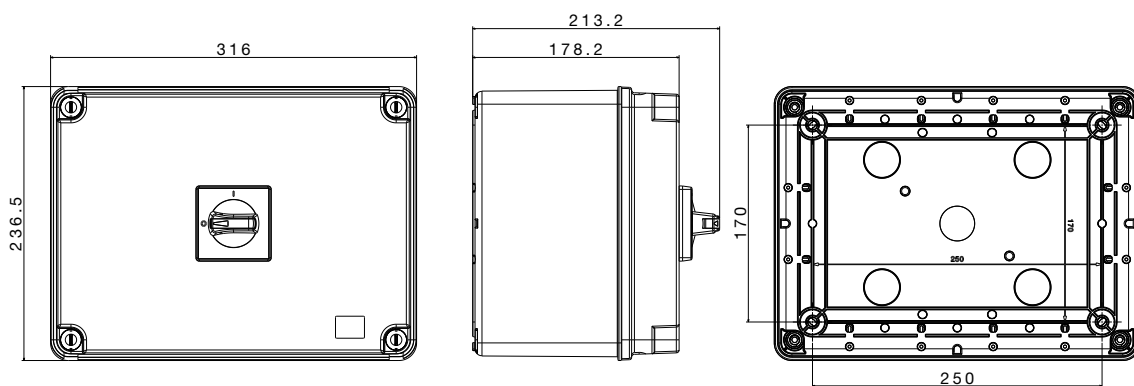
**ISOLATORS IN BOX 16 A ÷ 40 A 6P - 8P**



**ISOLATORS IN BOX 63 A ÷ 100 A 6P**



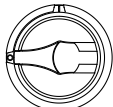
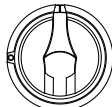


**ISOLATORS IN BOX 63 A ÷ 100 A 8P**



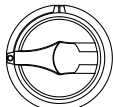
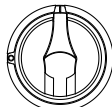


## Mechanical data 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

In (A)		16	25	32	40	63	80	100	125	160
Poles	2P	x	x	x	x					
	3P	x	x	x	x	x	x	x	x	x
	3P+N	x	x	x	x	x	x	x	x	x
	4P	x	x	x	x	x	x	x	x	x
Degree of protection		IP66								
Impact resistance		IK10 (box); IK08 (knob)								
Thermo-pressure with ball (°C)		80 (box)								
Glow Wire Test (°C)		650 (knob)								
Range of temperature (°C)		-25; +60								
Housable auxiliary contacts		Max. 2 (1 per side)						Max. 4* (2 per side)		
Holes entry	Upper sides	2 x M20/M25			2 x M25/M32			-		
	Lower sides	2 x M20/M25			2 x M25/M32			-		
Knob position		Open - OFF position			Close - ON position			Open - OFF position		Close - ON position
										

(\* In 4P versions the max number of auxiliary contacts that can be installed is 3 (2+1). In the 160A 4P version the maximum number of auxiliary contacts that can be installed is 1.

## Mechanical data 16 A ÷ 100 A 6P, 8P

In (A)		16	25	32	40	63	100
Poles	6P	x	x	x	x	x	x
	8P	x	x	x	x	x	x
Degree of protection		IP66					
Impact resistance		IK10 (box); IK08 (knob)					
Thermo-pressure with ball (°C)		80 (box)					
Glow Wire Test (°C)		650 (knob)					
Range of temperature (°C)		-25; +60					
Housable auxiliary contacts	6P	Max. 4 (2 per side)					
	8P	Max. 2 (1 per side)				Max. 1	
Holes entry	Upper sides	2 x M20			2 x M25		-
	Lower sides	2 x M20			2 x M25		-
Knob position		Open - OFF position			Close - ON position		
							

## Auxiliary Contacts

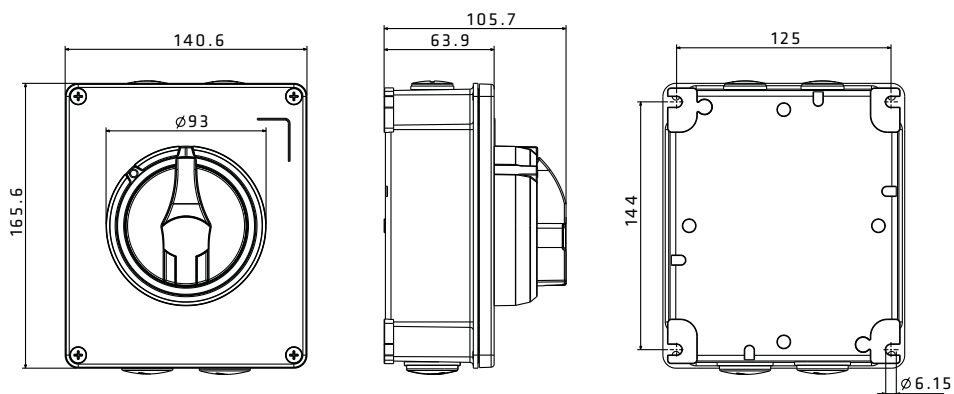
TECHNICAL DATA	
Type: Auxiliary Contacts NO or NC	Thermal current in Air (Ith): 16 A
Rated insulation voltage (Ui): 400 V	Thermal current in Boxes (Ithe): 10A
Conditional short circuit current (Icc - 400 V): 1 kA	Rated impulse withstand voltage (Uimp): 4 kV
Associated fuse size for conditional short circuit current - Type gG: 6A	Category of uses AC15: 6A (230V)
Tightening torque: 0,8 Nm	3A (380V)

# 70 RT HP

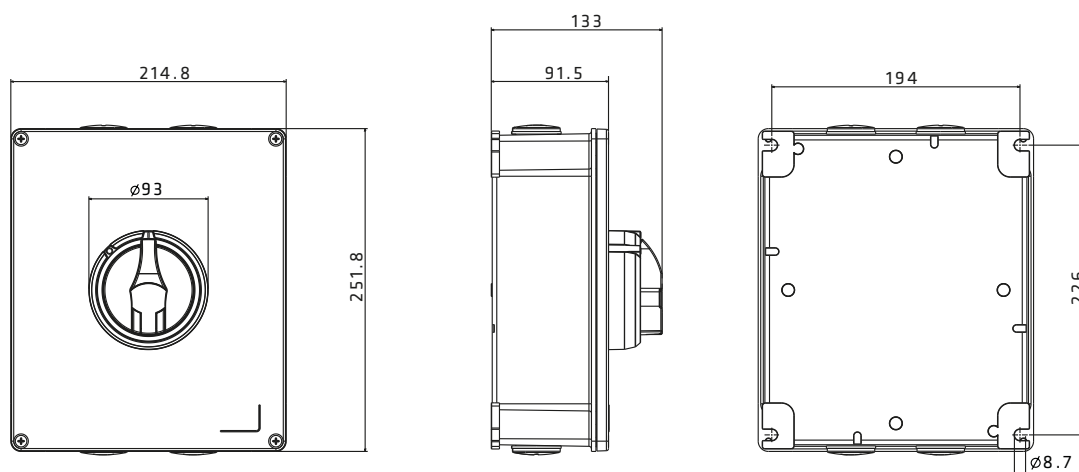
## Dimension tables 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

### ISOLATORS IN METAL BOX

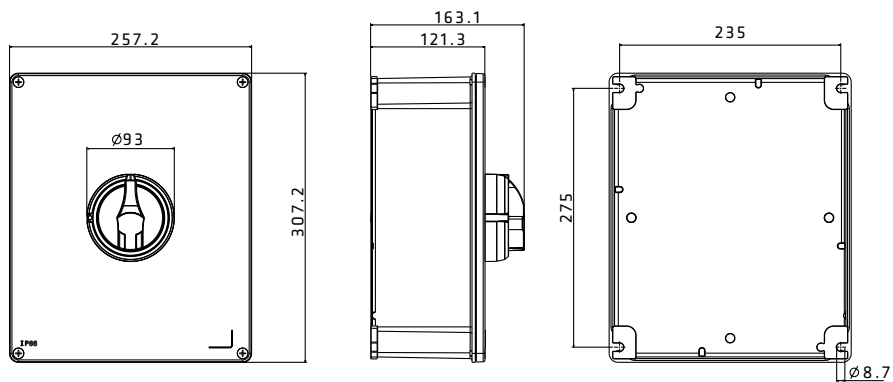
#### ISOLATORS IN BOX 16 A ÷ 40 A



#### ISOLATORS IN BOX 63 A - 80 A



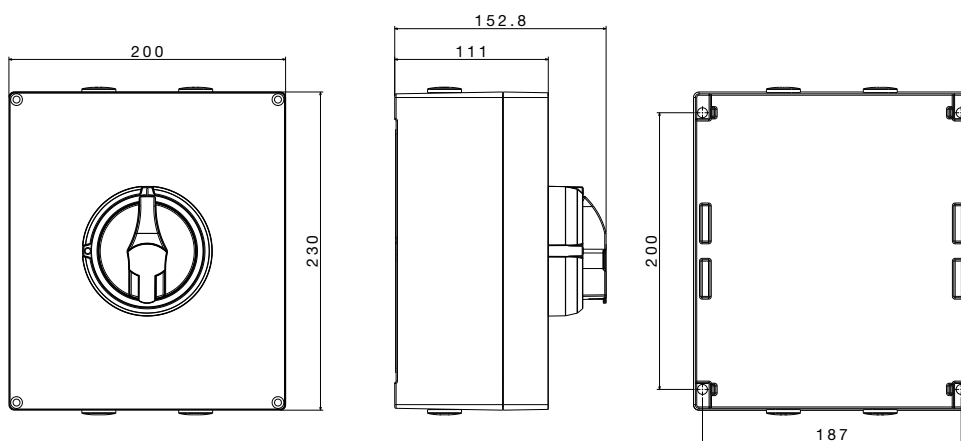
#### ISOLATORS IN BOX 100 A ÷ 160 A



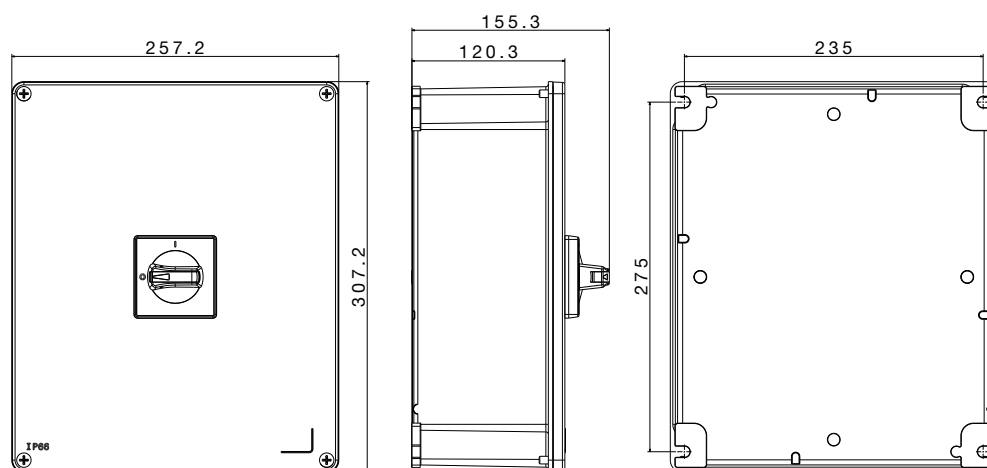
**Dimension tables 16 A ÷ 100 A 6P, 8P**

**ISOLATORS IN METAL BOX**

**ISOLATORS IN BOX 16 A ÷ 40 A**



**ISOLATORS IN BOX 63 A ÷ 100 A**





# 70 RT HP

## ROTARY ISOLATOR SWITCHES IN DIRECT CURRENT

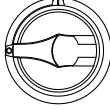
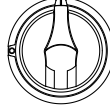
Rotary disconnecter switches in insulating box.

Complying with EN 60947-3 standard and CEI EN 60947-3:2021 (Annex D) for photovoltaic applications.

### Electrical data

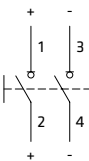
Code		GW 70 231	GW 70 235	GW 70 238	GW 70 239	GW 70 241	GW 70 242
Rated current IEC		16A	25A	32A	32A	40A	40A
DC21B / DCPV1	≤800V	DATA TO BE REQUESTED TO OUR TECHNICAL ASSISTANCE SERVICE					
	1000V						
	1250V						
	1500V						
Rated insulation voltage Ui	VAC						
Rated impulse withstand voltage Uimp	kV						
Thermal current Ith/Ithe	A						
Rated short time withstand current Icw (1s)	A						
<b>WIRING</b>							
Tightening torque	Nm	1,6					
Max. flexible wire	mm <sup>2</sup>	1 ÷ 10					
Max. rigid wire	mm <sup>2</sup>	1 ÷ 10					

### Mechanical data

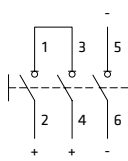
In (A)		16	25	32		40	
Poles		2P	3P	3P	4P	3P	4P
Degree of protection		IP66/IP67/IP69					
Impact resistance		IK08					
Protection against indirect contact		<input type="checkbox"/>					
Thermo-pressure with ball (°C)		125 (device); 80 (box)					
Glow Wire Test (°C)		960 (device); 650 (box)					
Range of temperature (°C)		-25; +60					
Holes entry	Upper sides	2 x M20	2 x M20	2 x M25	2 x M20	2 x M25	2 x M25
	Lower sides	2 x M20	2 x M20	2 x M25	2 x M20	2 x M25	2 x M25
Knob position		Open - OFF position		Close - ON position			
							

### Wiring diagram

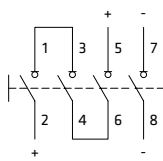
2P Version



3P Version



4P Version



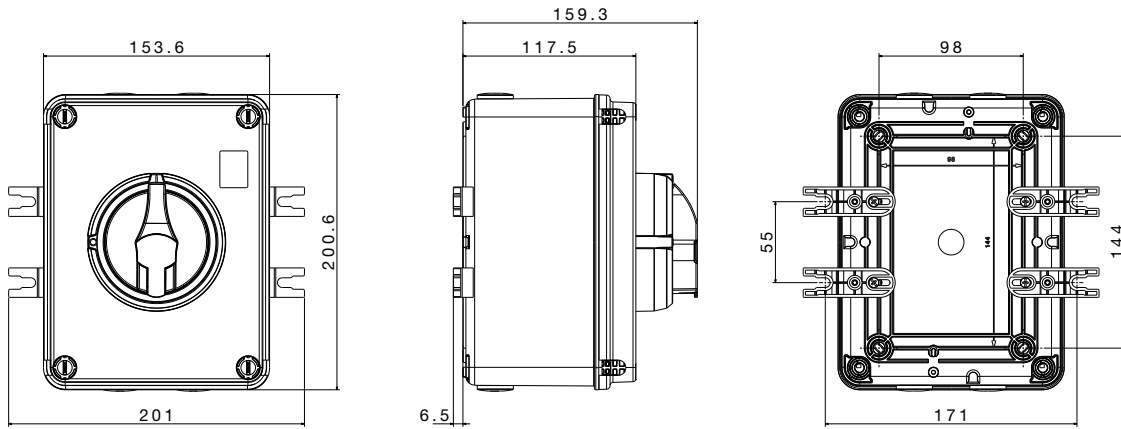
### BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

Saline solution	Acids		Bases		Solvents				Mineral oil	UV rays
	Concentrated	Diluted	Concentrated	Diluted	Hexane	Benzol	Acetone	Alcohol		
Resistant	Limited resistance	Resistant	Not Resistant	Limited resistance	Limited resistance	Not Resistant	Not Resistant	Limited resistance	Resistant	Resistant

**Dimension tables**

**ISOLATORS IN BOX**

**ISOLATORS IN BOX 16 A ÷ 40 A**



# 70 RT HP

## ROTARY ISOLATOR SWITCHES FOR DISTRIBUTION BOARDS

Rotary disconnecter switches in versions for board (16 A ÷ 800 A) or for DIN rail (16 A ÷ 63 A). Complying with EN 60947-3 standard.

### Electrical data 16 A ÷ 160 A 2P, 3P, 4P

Rated current IEC			16A	25A	32A	40A	63A	80A	100A	125A	160A
Rated insulation voltage Ui		VAC	690	690	690	690	690	690	1000	1000	1000
Rated impulse withstand voltage Uimp		kV	4	4	4	4	4	4	8	8	8
Thermal current Ith/Ithe		A	16	25	32	40	63	80	100	125	160
Rated operational current IEC	AC21A	415V A	16	25	32	40	63	80	100	125	160
	Resistive loads, including moderate overloads	500V A	16	25	32	40	63	80	100	125	160
		415V A	16	25	32	40	63	80	100	125	125
	Mixed resistive and inductive loads, including moderate overloads	500V A	16	25	32	40	63	80	80	100	100
		415V A	16	25	32	40	63	80	100	125	125
	AC23A	500V A	16	25	32	40	63	80	80	100	100
Switching of motor loads or other highly inductive loads (3 phases/3 poles)		500V A	16	25	32	40	63	80	80	100	100
Rated short time withstand current Icw (1s)		A	160	250	320	400	630	800	2500	2500	2500
Conditional short circuit current (Icc)		415V kA	10	10	10	10	6	6	10	10	10
		500V kA	6	6	6	6	6	6	6	6	6
Associated fuse for conditional short circuit current - Type gG		A	16	25	32	40	63	80	100	125	160
<b>WIRING</b>											
Tightening torque		Nm	1				3		6		
Max. flexible wire		mm <sup>2</sup>	1 ÷ 10				2,5 ÷ 25		4 ÷ 70		
Max. rigid wire		mm <sup>2</sup>	1 ÷ 10				2,5 ÷ 25		4 ÷ 70		

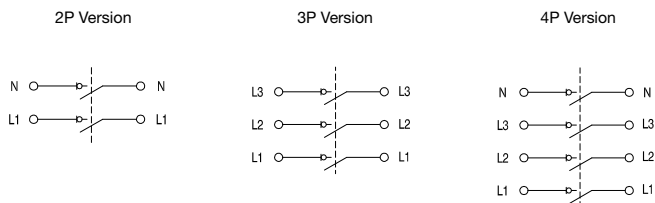
**NOTE:** the surface of the wiring terminals is knurled to improve the grip of the stripped cable inserted into the terminal and to facilitate wiring operations.

### Electrical data 200 A ÷ 800 A 3P, 4P

Rated current IEC			200A	250A	315A	400A	630A	800A	
Rated insulation voltage Ui		VAC	1000	1000	1000	1000	1000	1000	
Rated impulse withstand voltage Uimp		kV	12	12	12	12	12	12	
Thermal current Ith/Ithe		A	200	250	315	400	630	800	
Rated operational current IEC	AC21A	415V A	200	250	315	400	630	800	
		Resistive loads, including moderate overloads	500V A	200	250	315	400	630	800
			690V A	200	250	315	400	630	800
	AC22A	415V A	200	250	315	400	630	800	
		Mixed resistive and inductive loads, including moderate overloads	500V A	200	250	315	400	630	800
			690V A	200	250	315	400	630	800
	AC23A	415V A	200	250	315	400	630	800	
		Switching of motor loads or other highly inductive loads (3 phases/3 poles)	500V A	200	250	315	400	630	800
			690V A	200	250	315	400	630	800
	Rated short time withstand current Icw (1s)		kA	6	6	12,5	12,5	20	20
	Conditional short circuit current (Icc)		415V kA	100	100	80	80	DATA TO BE REQUESTED TO OUR TECHNICAL ASSISTANCE SERVICE	
			500V kA	100	100	80	80		
		690V kA	100	100	80	80			
Associated fuse for conditional short circuit current - Type gG		A	200	250	315	400			
<b>WIRING</b>									
Tightening torque		Nm	22			37		75	
Max. flexible wire		mm <sup>2</sup>	70 ÷ 185			1 x 185 ÷ 2 x 185		2 x 185	
Max. rigid wire		mm <sup>2</sup>	70 ÷ 185			1 x 185 ÷ 2 x 185		2 x 240	

**NOTE:** for versions from 200 ÷ 800A for applications with voltages ≥500V the phase barriers are required.

### Wiring diagram



## Auxiliary Contacts 16 A ÷ 160 A

TECHNICAL DATA	
Type: Auxiliary Contacts NO or NC	Thermal current in Air (Ith): 16 A
Rated insulation voltage (Ui): 400 V	Thermal current in Boxes (Ithe): 10A
Conditional short circuit current (Icc - 400 V): 1 kA	Rated impulse withstand voltage (Uimp): 4 kV
Associated fuse size for conditional short circuit current - Type gG: 6A	Category of use AC15: 6A (230V)
Tightening torque: 0,8 Nm	3A (380V)

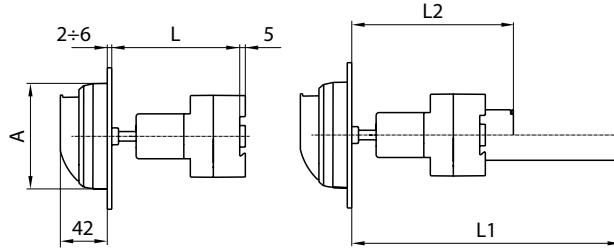
## Auxiliary Contacts 200 A ÷ 800 A

TECHNICAL DATA	
Type: Auxiliary Contacts EB or NC	Thermal current in Air (Ith): 16 A
Rated insulation voltage (Ui): 690 V	Rated impulse withstand voltage (Uimp): 6 kV
Conditional short circuit current (Icc - 690 V): 1 kA	Category of use AC15: 6A (230V)
Associated fuse size for conditional short circuit current - Type gG: 10A	3A (380V)

# 70 RT HP

## Dimension tables

### ROTARY ISOLATOR SWITCHES FOR BOARD: PANEL/DOOR MOUNTING 16 A ÷ 80 A

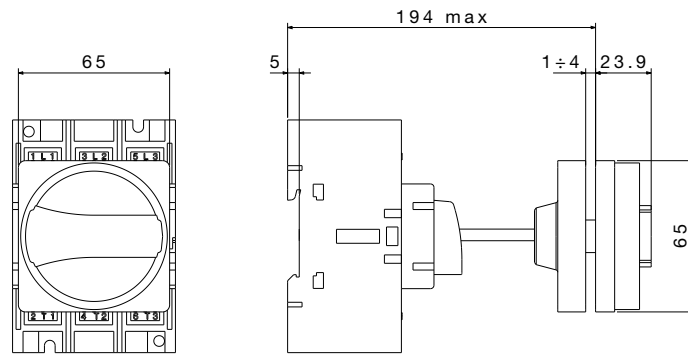


Isolator	WITHOUT BRACKETS		WITH BRACKETS		A
	Supplied with L	Adjustable up to L*	L1 max length obt.	L2 min length obt.**	
16A - 25A - 32A - 40A	145	87	(145+160) 305	(87+30) 117	ø 94
63A - 80A	177	114	(117+160) 337	(114+30) 144	ø 94

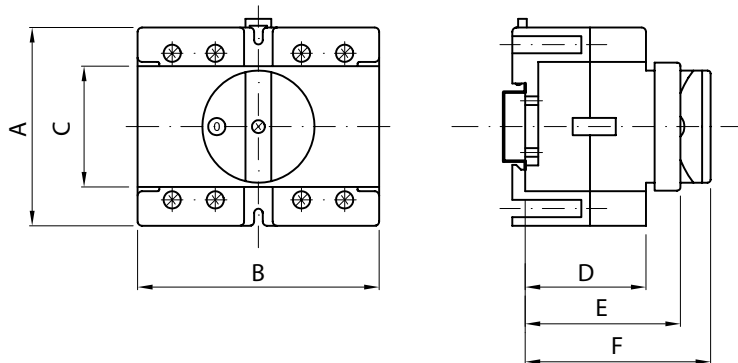
(\*) Position obtainable by cutting the shaft supplied.

(\*\*) Position obtainable by cutting both the shaft supplied, and the brackets, in the points shown.

### ROTARY ISOLATOR SWITCHES FOR BOARD: PANEL/DOOR MOUNTING 100 A ÷ 160 A



### ROTARY ISOLATOR SWITCHES FOR BOARD: DIN RAIL MOUNTING EN 50022 16 A ÷ 63 A

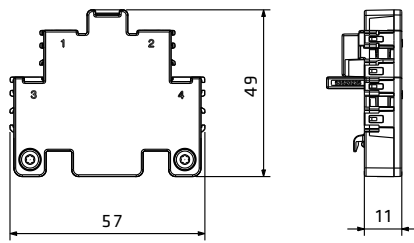


Type	A	B	C	D	E	F
16 - 32A	55	71 ●	45	37	53	68
63 A	73	89 ▲	45	44	56	68

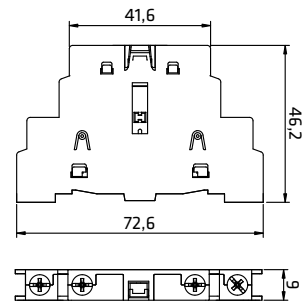
★ Occupies 3 modules (17,5 mm). ● Occupies 4 modules (17,5 mm). ▲ Occupies 5 modules (17,5 mm).

**Dimension tables**

**AUXILIARY CONTACTS 16 A ÷ 160 A**

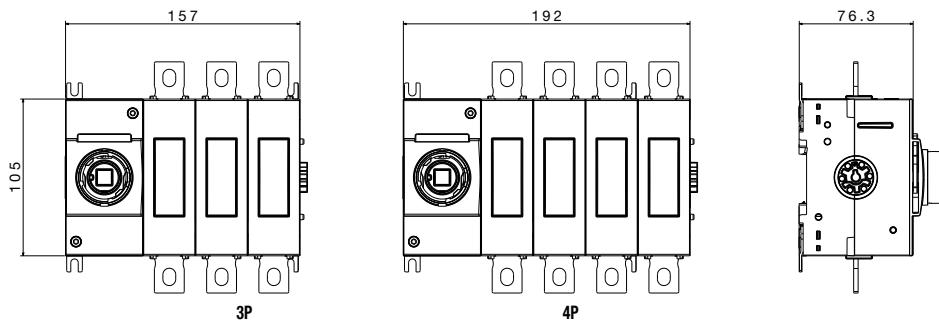


For isolator 16 - 25 - 32 - 40 - 63 - 80A

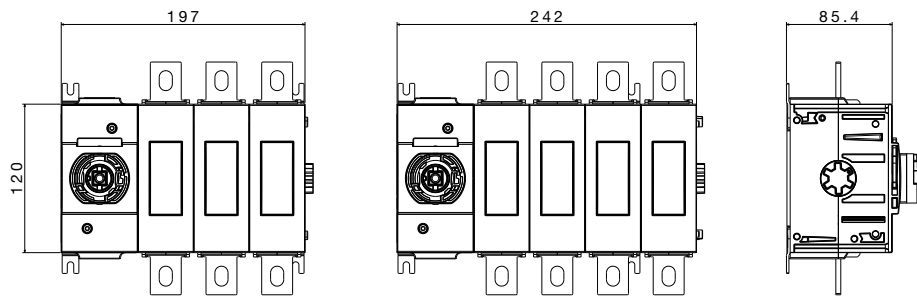


For isolator 100 - 125 - 160A and 16-100A 6P and 8P

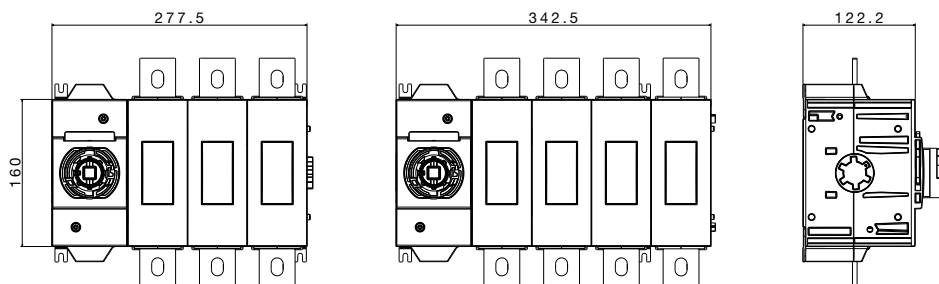
**ROTARY ISOLATOR SWITCHES FOR BOARD: PANEL/DOOR MOUNTING 200 A - 250 A**



**ROTARY ISOLATOR SWITCHES FOR BOARD: PANEL/DOOR MOUNTING 315 A - 400 A**



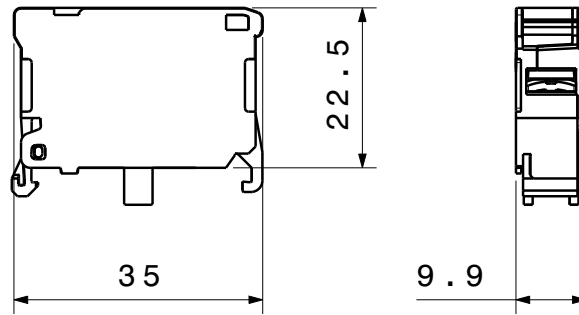
**ROTARY ISOLATOR SWITCHES FOR BOARD: PANEL/DOOR MOUNTING 630 A - 800 A**



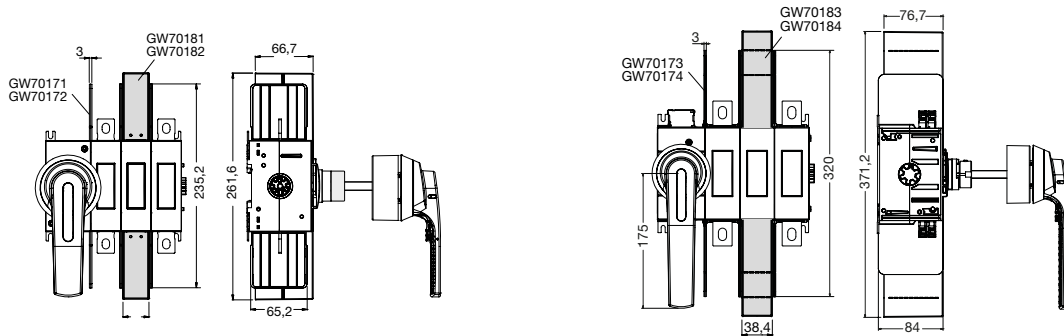
# 70 RT HP

## Dimension tables

### AUXILIARY CONTACTS 200 A ÷ 400 A



### PHASE BARRIERS AND TERMINAL COVERS 200 A ÷ 400 A

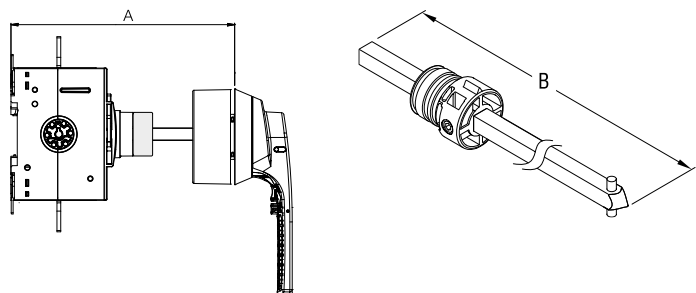


Isolators 200 A - 250 A

Isolators 315 A - 400 A

### SHAFTS FOR PANEL/DOOR MOUNTING KNOB A 200 A ÷ 400 A

Isolator	A	B
200A - 250A	124 ÷ 244	200
	124 ÷ 344	300
315A - 400A	157 ÷ 277	200
	157 ÷ 377	300
630A - 800A	DATA TO BE REQUESTED TO OUR TECHNICAL ASSISTANCE SERVICE	



## 70 RT ATEX DISCONNECTORS - METAL BOX

Switch disconnectors for command and emergency in aluminium box painted in Grey Ral 7037, suitable for use in **ZONE 22(D)** with rated current of 16-32-63-100A.  
Standard: EN 60947-3, EN 61241-0, EN60079-0, EN60079-31 - Dir. ATEX 94/9/CE.

TECHNICAL DATA					16A	32A	63A	100A
Vn insulation	Ui (IEC947-3)		V	800				
Vn of impulse withstand	Uimp (IEC947-3)		kV	8				
In thermal	In air	Ith (IEC947-3)	A	25	40	63	100	
	In box	Ithe (IEC947-3)	A	16	32	63	95	
In use	AC21A	Ie (IEC947-3)	400V	A	16	32	63	95
	AC22A		400V	A	16	32	63	95
Max power with three-phase motors	AC23A	IEC947-3	400V	kW	7	14	28	42
In short lifespan	Icw		A	400	800	1500	1500	
In cond. of short-circuiting	IEC947-3		kAeff	10	10	15	15	
CONNECTABLE SECTIONS								
Rigid cables	min-max		mm <sup>2</sup>	1,5-16	1,5-16	2,5-35	10-70	
			AWG	16-6	16-6	14-3	8-00	
Flexible cables	min-max		mm <sup>2</sup>	1,5-16	1,5-16	2,5-35	10-70	
			AWG	16-6	16-6	14-3	8-00	
CONDITIONS OF USE								
Ambient temperature	of storage		°C	-30; +70				
	of operation		°C	-25; +55				

Note: for the behaviour with chemical and atmospheric agents, contact SAT Customer Service (+ 39 035/946111).

## Dimension tables

### SWITCH DISCONNECTORS FOR COMMAND AND EMERGENCY

