

## 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	6	6	6	6	6	6	6	6	6	
<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			

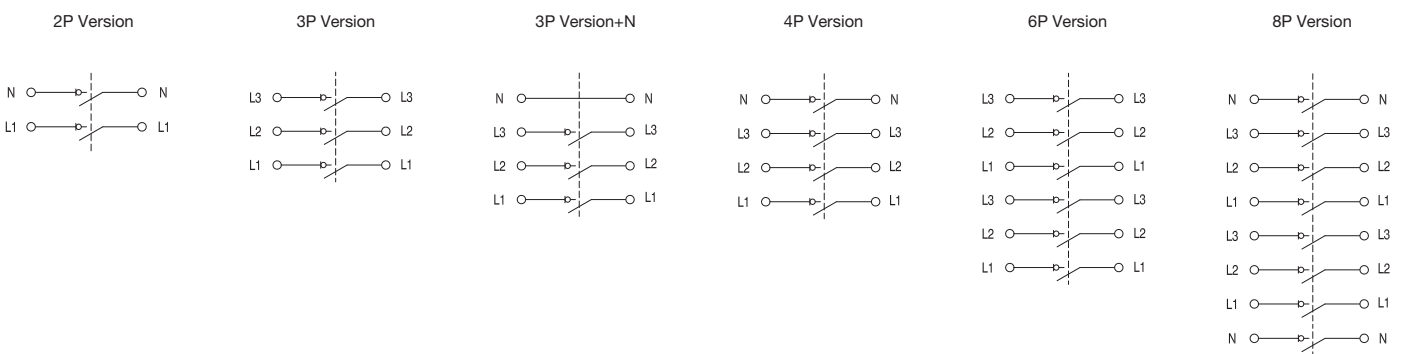
\* The surface of the wiring terminals is knurled to improve the grip of the stripped cable inserted into the terminal and to facilitate wiring operations.

### 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



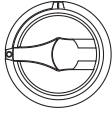
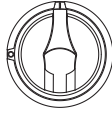


### BEHAVIOUR WITH CHEMICAL AND ATMOSPHERIC AGENTS

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

# 70 RT HP

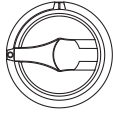
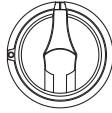
## Mechanical data 16 A ÷ 160 A 2P, 3P, 3P+N, 4P

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 M32	-		
	Lower sides	2 x M20	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.

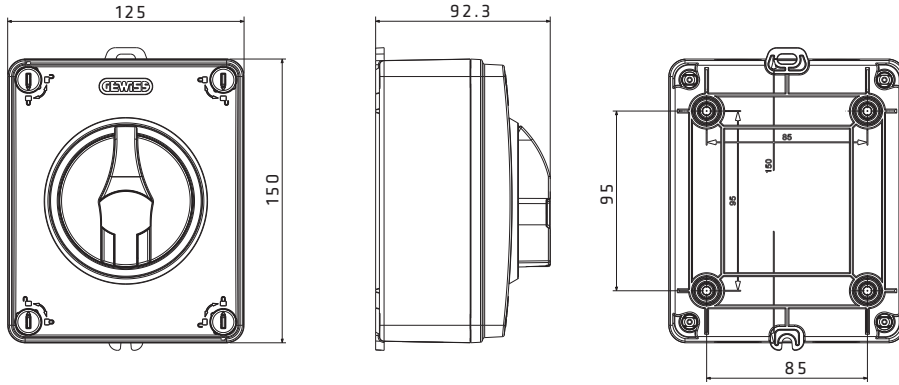
## Auxiliary Contacts

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)

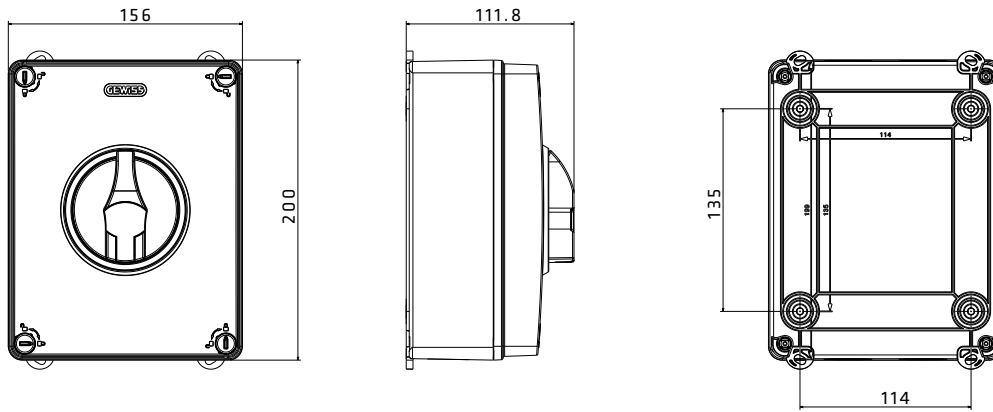
**Dimension tables 16 A ÷ 160 A 2P, 3P, 3P+N, 4P**

**ISOLATORS IN PLASTIC BOX**

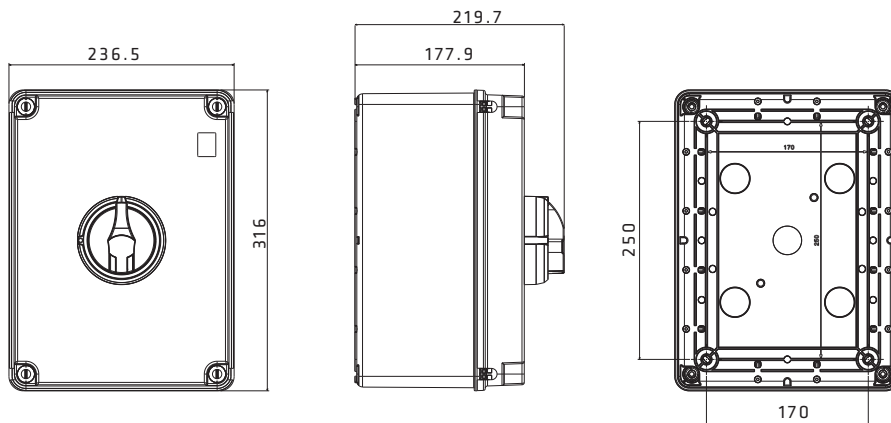
**ISOLATORS IN BOX 16 A ÷ 40 A**



**ISOLATORS IN BOX 63 A - 80 A**



**ISOLATORS IN BOX 100 A ÷ 160 A**

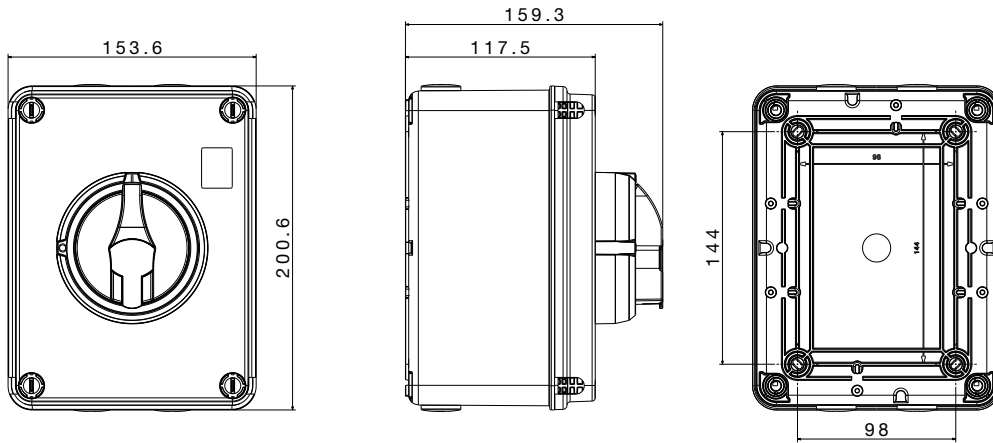


# 70 RT HP

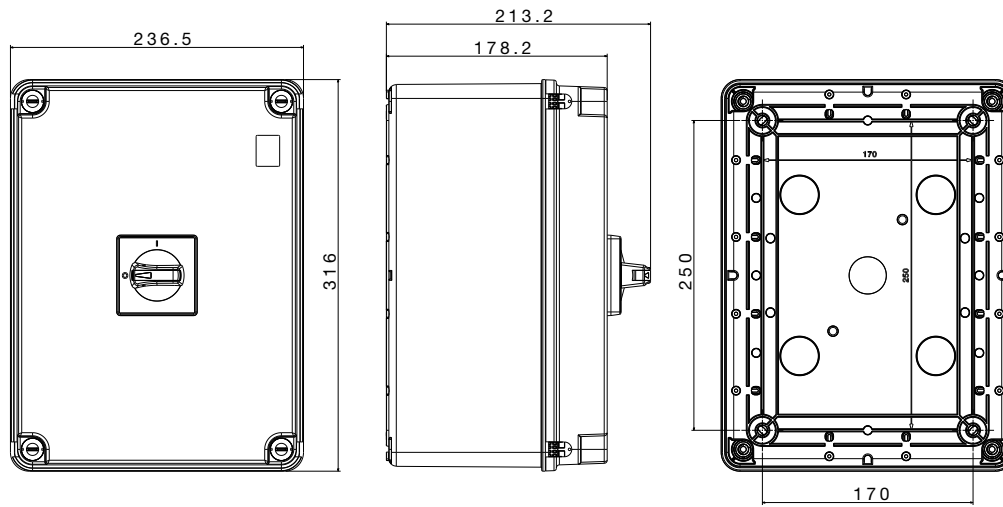
## Dimension tables 16 A ÷ 100 A 6P, 8P

### ISOLATORS IN PLASTIC BOX

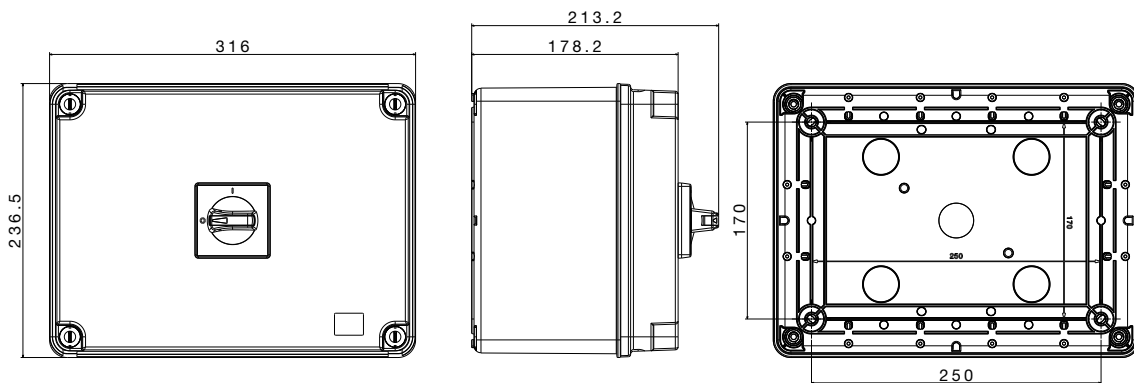
#### ISOLATORS IN BOX 16 A ÷ 40 A 6P - 8P



#### ISOLATORS IN BOX 63 A ÷ 100 A 6P



#### ISOLATORS IN BOX 63 A ÷ 100 A 8P



## ROTARY ISOLATOR SWITCHES IN METAL 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
Associated fuse for conditional short circuit current - Type gG		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			

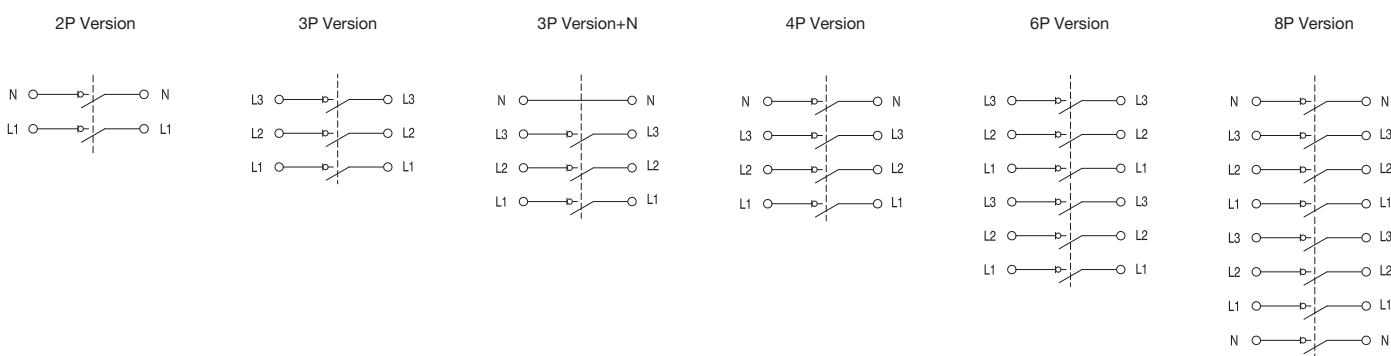
\* The surface of the wiring terminals is knurled to improve the grip of the stripped cable inserted into the terminal and to facilitate wiring operations.

### 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.



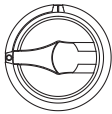
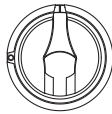
## Wiring diagram



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	Limited resistance	Limited resistance	Limited resistance	Resistant	Resistant	Resistant	Resistant	Resistant	Resistant

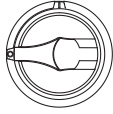
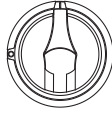
# 70 RT HP

## 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	2 x M20			2 x M32		-		
	Lower sides	2 x M20	2 x M25			2 x 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				
							

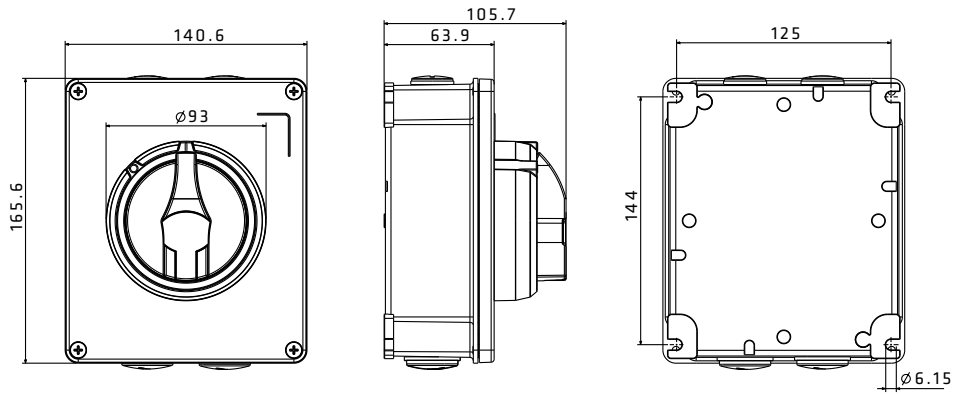
## Auxiliary Contacts

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)

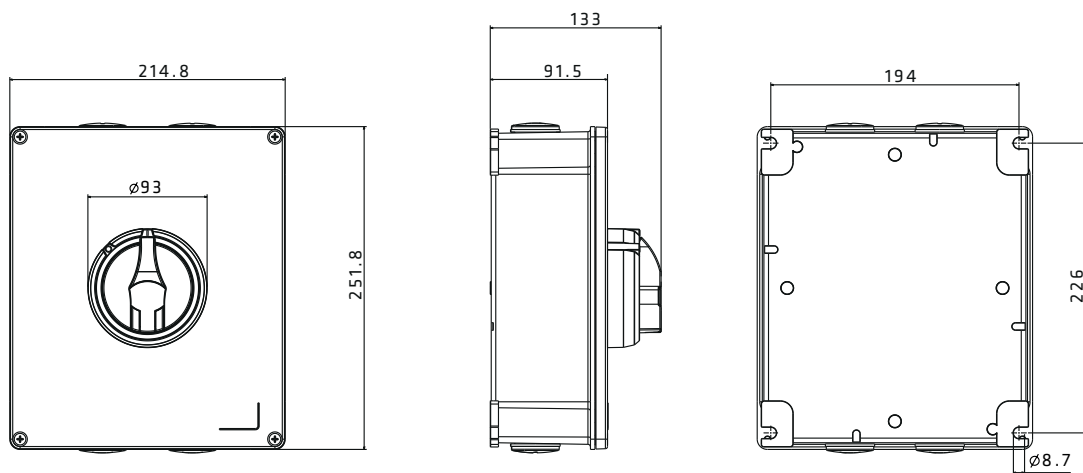
**Dimension tables 16 A ÷ 160 A 2P, 3P, 3P+N, 4P**

**ISOLATORS IN METAL BOX**

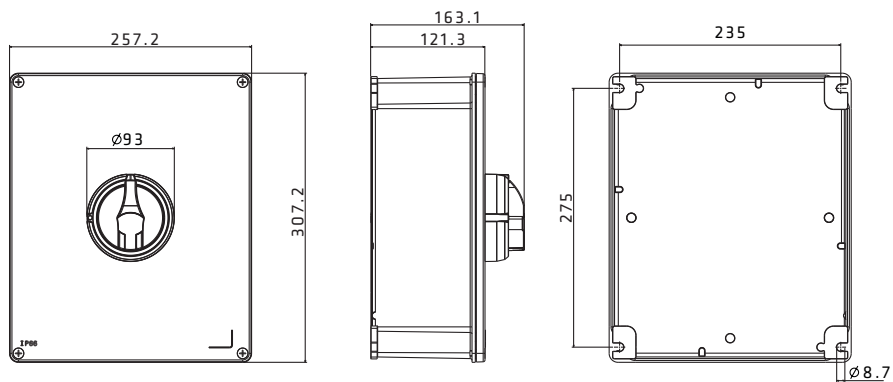
**ISOLATORS IN BOX 16 A ÷ 40 A**



**ISOLATORS IN BOX 63 A - 80 A**



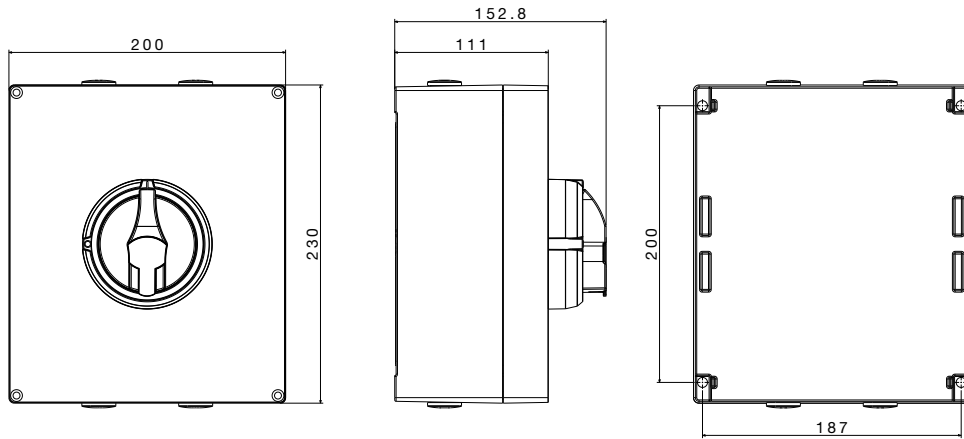
**ISOLATORS IN BOX 100 A ÷ 160 A**



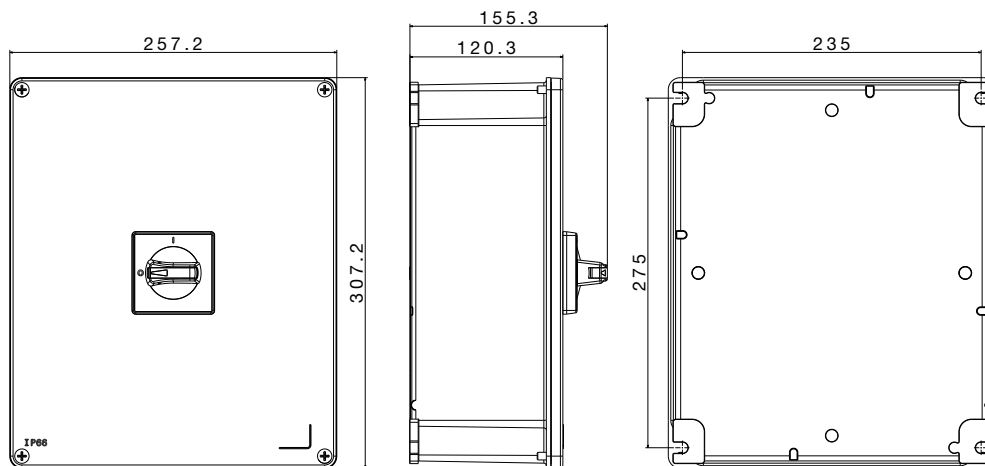
## Dimension tables 16 A ÷ 100 A 6P, 8P

### ISOLATORS IN METAL BOX

#### ISOLATORS IN BOX 16 A ÷ 40 A



#### ISOLATORS IN BOX 63 A ÷ 100 A



## ROTARY ISOLATOR SWITCHES IN DIRECT CURRENT

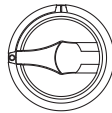
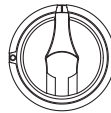
Rotary disconnecter switches in insulating box.

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

### Electrical data

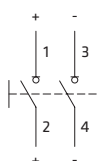
Code		GW 70 231	GW 70 235	GW 70 238	GW 70 239	GW 70 242
Rated current IEC		16A	25A	32A	32A	40A
DCPV1	≤800V	25A	25A	32A	32A	32A
	1000V	16A	25A	32A	32A	32A
	1200V				25A	32A
	1500V				20A	25A
Rated insulation voltage Ui	VAC	1000V				
Rated impulse withstand voltage Uimp	kV	8kV				
Thermal current Ith/Ithe	A	25A / 25A	25A / 25A	32A / 32A	32A / 32A	40A / 32A
Rated short time withstand current Icw (1s)	A	500A				
<b>WIRING</b>						
Tightening torque	Nm	1,2				
Max. flexible wire	mm <sup>2</sup>	1 ÷ 10				
Max. rigid wire	mm <sup>2</sup>	1 ÷ 10				

### Mechanical data

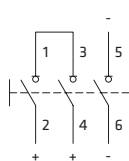
In (A)		16	25	32	40
Poles		2P	3P	3P	4P
Degree of protection		IP66/IP67/IP69			
Impact resistance		IK08			
Protection against indirect contact		☐			
Thermo-pressure with ball (°C)		125 (device); 80 (box)			
Glow Wire Test (°C)		960 (device); 650 (box)			
Range of temperature (°C)		-25; +60			
Holes entry	Upper sides	2 x M20	2 x M20	2 x M25	2 x M25
	Lower sides	2 x M20	2 x M20	2 x M25	2 x M25
Knob position		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Open - OFF position</p>  </div> <div style="text-align: center;"> <p>Close - ON position</p>  </div> </div>			

### Wiring diagram

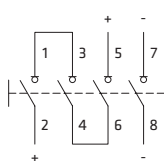
2P Version



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

# 70 RT HP

## Dimension tables

### ISOLATORS IN BOX

#### ISOLATORS IN BOX 16 A ÷ 40 A

