

Safety enclosures

Normal atmospheres

polyester enclosures from 50 to 1600 A



coff_219_a_2_cat

Polyester enclosure with front operation handle



coff_163_a_3_cat

Polyester enclosure with side operation handle

Function

Safety enclosures equipped with SOCOMEC switches provide emergency breaking, breaking for mechanical maintenance and safety isolation in the vicinity of any low voltage final circuit.

Advantages

Safety of operations

- Visible contacts and positive break indication with the possibility to add a mechanical indicator.
- Double locked door when the switch is in the OFF position.
- Triple locking of the handle in the OFF position.

Inductive load breaking (AC23)

Safety enclosures are designed for use with inductive loads and are able to make and break on load (AC23).

Robust design

Products have been designed for severe industrial conditions with chemical, pollution or atmospheric corrosion risks
(Polyester enclosure: good resistance to chemicals, self-extinguishable at 960°C, etc.)

The solution for

- Steel works
- Cement works
- Automotive
- Mining industries
- Food processing
- Chemical industry



Strong points

- Safety of operations
- Inductive load breaking (AC23)
- Robust design
- Easy implementation

Conformity to standards

- IEC 60364
- IEC 60947-3
- IEC 60204-1
- IEC 61439-2

Specific requests

- SOCOMEC can offer customised solutions to meet your specific requirements. Please contact your Socomec office for further information.

General characteristics

Breaking device

All polyester safety enclosures are equipped with SIDER load break switches and visible, reliable indication of the contacts open position. They make and break under load conditions and provide safety isolation for any low voltage circuit.

Enclosure

Enclosures are made of glass fibre reinforced polyester and are of the following types:

- COMBIESTER from 50 to 500 A (RAL7035)
- MINIPOL from 630 to 800 A (RAL7035)

Covers on COMBIESTER enclosures are hinged and equipped with a screw locking system. Doors on MINIPOL enclosures can be locked using a 3 mm double bar key.

These enclosures have good resistance to chemical agents and are self-extinguishing at 960 °C.

These enclosures provide a protection degree of IP55. Wall mounting is achieved using 4 fixing lugs, supplied loose.

Visible breaking

The contacts are visible through:

- The transparent cover of COMBIESTER enclosures.
- A door-mounted triplex glass window on MINIPOL enclosures. This enables the operator to confirm the position of the contacts either during a preventative check or before an operation.

Double locking

This function is achieved through a simple and robust mechanism using an extension shaft. Activation with the door open remains possible by authorised personnel.

Operating handle

Polyester safety enclosures are available with front or side operation handles. The handle is red and made of an insulating material (emergency breaking). The handle can be locked in the OFF position using three padlocks.

Connection

Polyester safety enclosures are available in two versions:

- TB version (top entry and bottom cable exit)
- BB version (bottom cable entry/exit). Connection is achieved by running cables to the top for 50 A and 80 A ratings. For higher ratings, the top set of terminals are brought down to the bottom of the enclosure with copper bars for easy connection of the incoming cables.

Miscellaneous

- An earthing bar for connection is available in the enclosure.
- Protection screen for live parts.

References

Front operation



coff_219_a_2_cat

Side operation



coff_163_b_1_cat

Rating (A)	No. of poles	Front operation[1][2] Top/Bottom connection Reference	Front operation[1][2] Bottom/Bottom connection Reference
125	3 P	3215 **3012**	3225 **3012**
125	4 P	3215 **4012**	3225 **4012**
125	6 P	3215 **6012**	3225 **6012**
200	3 P	3215 **3020**	3225 **3020**
200	4 P	3215 **4020**	3225 **4020**
200	6 P	3215 **6020**	3225 **6020**
400	3 P	3215 **3040**	3225 **3040**
400	4 P	3215 **4040**	3225 **4040**
400	6 P	3215 **6040**	3225 **6040**
500	3 P	3215 **3050**	3225 **3050**
500	4 P	3215 **4050**	3225 **4050**
630	3 P	3215 **3063**	3225 **3063**
630	4 P	3215 **4063**	3225 **4063**
800	3 P	3215 **3080**	3225 **3080**
800	4 P	3215 **4080**	3225 **4080**
1250	3 P	3215 **3120**	3225 **3120**
1250	4 P	3215 **4120**	3225 **4120**
1600	3 P	3215 **3160**	3225 **3160**
1600	4 P	3215 **4160**	3225 **4160**

Rating (A)	No. of poles	Side operation[1][2] Top/Bottom connection Reference	Side operation[1][2] Bottom/Bottom connection Reference
50	3 P	3265 **3005**	3265 **3005**
50	4 P	3265 **4005**	3265 **4005**
50	6 P	3265 **6005**	3265 **6005**
80	3 P	3265 **3008**	3265 **3008**
80	4 P	3265 **4008**	3265 **4008**
80	6 P	3265 **6008**	3265 **6008**
125	3 P	3265 **3012**	3275 **3012**
125	4 P	3265 **4012**	3275 **4012**
125	6 P	3265 **6012**	3275 **6012**
200	3 P	3265 **3020**	3275 **3020**
200	4 P	3265 **4020**	3275 **4020**
200	6 P	3265 **6020**	3275 **6020**
400	3 P	3265 **3040**	3275 **3040**
400	4 P	3265 **4040**	3275 **4040**
500	3 P	3265 **3050**	3275 **3050**
500	4 P	3265 **4050**	3275 **4050**
630	3 P	3265 **3063**	3275 **3063**
630	4 P	3265 **4063**	3275 **4063**
800	3 P	3265 **3080**	3275 **3080**
800	4 P	3265 **4080**	3275 **4080**
1250	3 P	3265 **3120**	3275 **3120**
1250	4 P	3265 **4120**	3275 **4120**
1600	3 P	3265 **3160**	3275 **3160**
1600	4 P	3265 **4160**	3275 **4160**

(1) For the mechanical indicator option, replace the second digit of the enclosure reference number with the letter V. For example: 3V15 3012.

(2) Stainless steel enclosures, specific locking systems, terminal pre-wired/non pre-wired control auxiliary contacts, ventilation and humidity evacuation systems or cable glands are available upon request. Please consult us.

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Accessories

Auxiliary contacts

Use

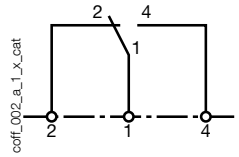
For pre-breaking and signalling of positions 0 and I of the load break switch.

Mounting

- On the double locking system.
- Possibility of factory mounting on enclosure (please provide enclosure reference when ordering).

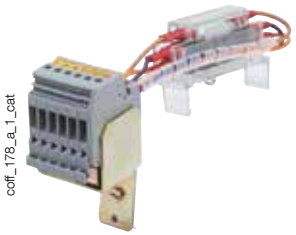


1st NO / NC AC for pre-break

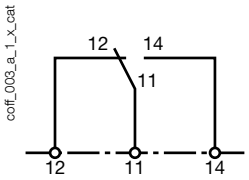


Contact(s)	AC	Factory fitted AC	Factory fitted low level auxiliary
1st NO/NC changeover AC front operation ≥ 125 A	2799 **0001**	2799 **1001**(1)	
2nd NO/NC changeover AC front operation ≥ 125 A	2799 **0002**	2799 **1002**(1)	
2 NO/NC changeover AC side operation	2999 **0012**	2999 **1012**	
2 NO/NC changeover AC wired side operation	3290 **6002**	3290 **6102** (1)	3290 **6012**(1)

(1) Please provide the reference number of the enclosure to be equipped.



2nd NO / NC AC for pre-break



Key handle interlocking system

Use

Kit allowing a RONIS EL11AP or Serv Trayvou XOP10 lock to be fitted for a SIDER 50 to 1600 A, with side operation within a steel or polyester enclosure.



Type	Locking in position 0	
	Reference	Factory option Reference
Locking using RONIS EL 11AP lock (not included)	3290 **7005**	3290 **7006**(1)
Locking using XOP10 lock (not included)	3290 **7015**	
Lock RONISEL11AP	4409 **8511**	
Serv Trayvou XOP10 lock	4409 **8601**	

(1) Please provide the reference number of the enclosure to be equipped.

Characteristics

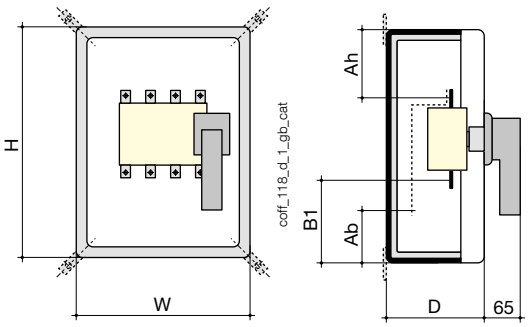
Characteristics according to IEC 60947-3

Rating (A)		50 A	80 A	125 A	200 A	400 A	500 A	630 A	800 A	1250 A	1600 A
Rated operational currents I_e (A)											
Rated voltage	**Utilisation category**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**	**(A)**
400 VAC	AC-21A	50	80	125	200	400	500	630	800	1250	1600
400 VAC	AC-22A	50	63	125	200	400	400	630	800	1250	1250
400 VAC	AC-23A	32	40	125	200	400	400	630	630	1000	1000
690 VAC	AC-21A	40	63	125	160	400	400	630	800	1000	1250
690 VAC	AC-22A	25	63	80	160	400	200	315	315	400	400
690 VAC	AC-23A	-	10	80	160	315	80	100	125	200	200
Motor power output (kW) (1)											
A 400 VAC without pre-break AC		22	30	63	110	220	220	375	375	600	600
A 690 VAC without pre-break AC		-	8	11	150	295	75	90	110	185	185
A 400 VAC with pre-break AC		25	37	63	110	220	220	375	475	750	750
A 690 VAC with pre-break AC		37	55	55	150	400	185	295	295	400	400

(1) The power value is given for information only; the current values vary from one manufacturer to another.

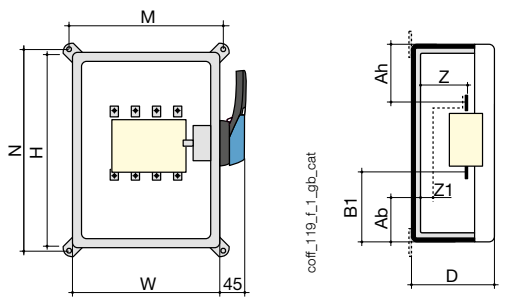
Dimensions

Front operation



Rating (A)	No. of poles	H x W x D (mm)	Connection cross-section (mm²)	Top/Bottom connection Ah (mm)	B1 (mm)	Weight (kg)	Bottom/Bottom connection Ab (mm)	B1 (mm)	Weight (kg)
125	3/4 P	360 x 270 x 171	50	135	110	6	-	-	-
125	3/4 P	360 x 270 x 201	50	-	-	-	167	205	6
125	6 P	360 x 540 x 171	50	135	110	8	167	205	9
200	3 P	360 x 270 x 201	95	-	-	-	145	190	8
200	3 P	540 x 270 x 201	95	260	150	7	-	-	-
200	4 P	360 x 360 x 201	95	-	-	-	145	190	8
200	4 P	540 x 360 x 201	95	257	153	9	-	-	-
200	6 P	360 x 540 x 201	95	257	153	13	145	190	15
400	3/4 P	720 x 540 x 214	185	258	257	19	330	395	24
500	3/4 P	720 x 540 x 214	185	258	257	20	330	390	26
630	3/4 P	800 x 600 x 300	2 x 300	270	270	26	330	400	36
800	3/4 P	800 x 600 x 300	2 x 300	266	267	27	330	394	40
1250	3/4 P	Please consult us	4 x 185	365	365	42	515	594	60
1600	3/4 P	Please consult us	4 x 300	360	360	47	500	580	65

Side operation



Rating (A)	No. of poles	H x W x D (mm)	Connection cross-section (mm²)	Top/Bottom connection Ah (mm)	B1 (mm)	Weight (kg)	Bottom/Bottom connection Ab (mm)	B1 (mm)	Weight (kg)
50	3/4 P	270 x 180 x 171	16	84	116	3	-	116	3
50	6 P	270 x 360 x 201	16	84	116	5	-	116	5
80	3/4 P	270 x 180 x 171	35	73	106	3	-	106	3
80	6 P	270 x 360 x 201	35	73	106	5	-	106	5
125	3/4 P	360 x 270 x 171	50	135	110	6	167	205	6
125	6 P	360 x 540 x 171	50	135	110	9	167	205	9
200	3 P	360 x 270 x 171	95	-	-	-	145	190	7
200	3 P	540 x 270 x 171	95	260	150	8	-	-	-
200	4 P	360 x 360 x 171	95	-	-	-	145	190	8
200	4 P	540 x 360 x 171	95	257	153	9	-	-	-
200	6 P	540 x 540 x 171	95	260	150	12	145	190	11
400	3/4 P	720 x 540 x 201	185	300	215	19	370	437	24
500	3/4 P	720 x 540 x 201	185	300	215	21	230	432	26
630	3/4 P	800 x 600 x 300	2 x 300	270	270	26	390	438	36
800	3/4 P	800 x 600 x 300	2 x 300	266	267	27	370	434	40
1250	3/4 P	Please consult us	4 x 185	365	365	42	570	622	60
1600	3/4 P	Please consult us	4 x 300	360	360	47	550	608	65