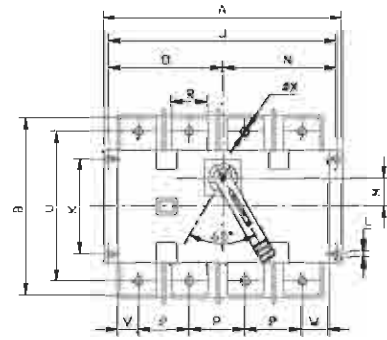


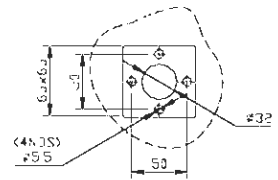
The Cubicle Load Break Switch

OVERALL DIMENSION

Sirco 63A Direct Front Operation



Door Drilling for Interlock Assy. Mounting



Sirco 63A External Front Operation

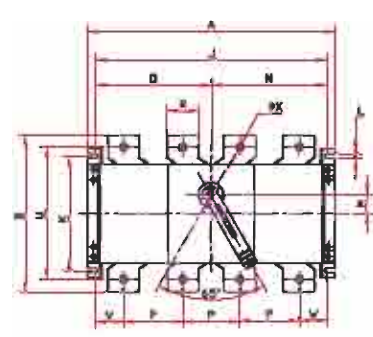


Panel Cover Thickness 1.5

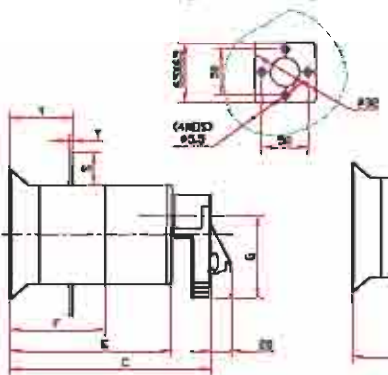
| OVER ALL DIMENSION | | FIXING OF SW. | | CONNECTION TERMINAL | | SW. WT. | | | | | | | | | | | | | | | | | |
|--------------------|-----|---------------|-----|---------------------|----|---------|----|-----|----|-----|----|----|----|----|----|----|---|----|-----|----|-----|----------|-----------|
| Rating | A | B | C | D | E | G | J | K | L | M | N | O | P | R | S | T | U | V | W | ØX | Y | Open Ex. | |
| 4 x 63A | 153 | 106 | 120 | 134 | 45 | 70 | 84 | 138 | 53 | 6.5 | 15 | 69 | 69 | 27 | 14 | 18 | 2 | 91 | 8.5 | 17 | 6.5 | 53 | 0.860 Kg. |

All Dimension in MM.

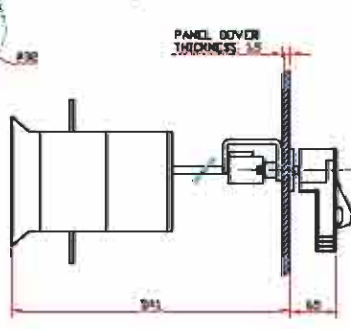
Sirco 125-630A Direct Front Operation



Door Drilling for Interlock Assy. Mounting



Sirco 125-630A External Front Operation



| OVER ALL DIMENSION | | FIXING OF SW. | | CONNECTION TERMINAL | | SW. WT. | | | | | | | | | | | | | | | | | |
|--------------------|-----|---------------|-----|---------------------|-----|---------|-----|-----|-----|-----|----|-----|-----|----|----|----|-----|-----|----|----|------|----|----------|
| Rating | A | B | C | D | E | F | G | J | K | L | M | N | O | P | R | S | T | U | V | W | ØX | Y | Open Ex. |
| 4 x 125A | 178 | 142 | 160 | 171 | 101 | 72 | 118 | 169 | 96 | 7.0 | 16 | 81 | 81 | 45 | 22 | 28 | 3.0 | 118 | 12 | 12 | 8.5 | 56 | 1.8 Kg. |
| 4 x 200A | 178 | 155 | 160 | 171 | 101 | 72 | 118 | 169 | 95 | 7.0 | 15 | 81 | 81 | 48 | 25 | 35 | 4.0 | 123 | 7 | 7 | 10.5 | 57 | 2.1 Kg. |
| 4 x 250A | 230 | 192 | 174 | 187 | 115 | 79 | 130 | 212 | 111 | 7.5 | 20 | 110 | 110 | 84 | 32 | 48 | 4.5 | 152 | 7 | 13 | 12 | 84 | 3.1 Kg. |
| 4 x 320A | 230 | 192 | 174 | 187 | 116 | 79 | 130 | 212 | 111 | 7.6 | 20 | 110 | 110 | 84 | 32 | 46 | 4.5 | 152 | 7 | 13 | 12 | 84 | 3.1 Kg. |
| 4 x 400A | 290 | 235 | 218 | 225 | 157 | 98 | 142 | 271 | 180 | 9.0 | 30 | 135 | 135 | 73 | 40 | 40 | 5.0 | 205 | 28 | 28 | 11 | 88 | 8.0 Kg. |
| 4 x 630A | 280 | 270 | 218 | 225 | 157 | 98 | 142 | 271 | 180 | 9.0 | 30 | 135 | 135 | 81 | 55 | 55 | 5.0 | 230 | 14 | 14 | 14.5 | 88 | 7.0 Kg. |

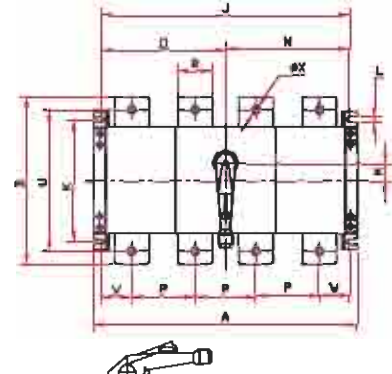
All Dimension in MM.

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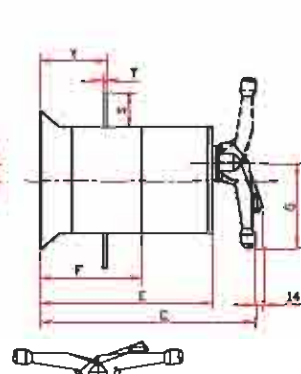
an Indo-French joint venture

The Cubicle Load Break Switch

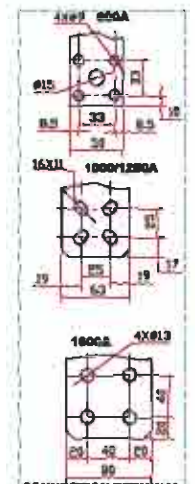
Sirco 800-1600A Direct Front Operation



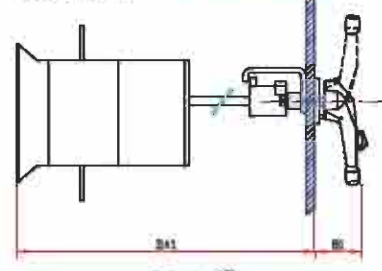
Handle for 800A



Handle for 1000A-1600A



Sirco 800-1600A External Front Operation

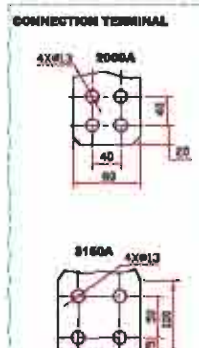
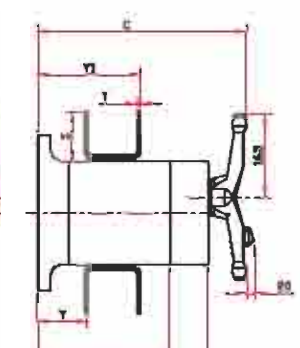
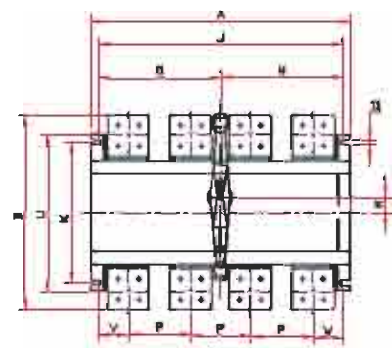


Door Drilling for Interlock Assy. Mounting

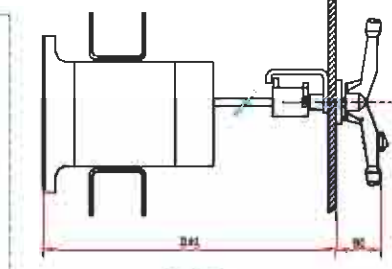
| OVER ALL DIMENSION | | FIXING OF SW. | | CONNECTION TERMINAL | | SW. WT. | | | | | | | | | | | | | | | | | |
|--------------------|-----|---------------|-----|---------------------|-----|---------|-----|-----|-----|----|----|-----|-----|-----|----|----|-----|-----|----|----|----|-----|----------|
| Rating | A | B | C | D | E | F | G | J | K | L | M | N | O | P | R | S | T | U | V | W | ØX | Y | Open Ex. |
| 4 x 800 A | 360 | 320 | 270 | 275 | 205 | 150 | 212 | 340 | 220 | 11 | 28 | 170 | 170 | 80 | 50 | 80 | 6.0 | 288 | 52 | 48 | 15 | 110 | 11.7 Kg. |
| 4 x 1000 A | 496 | 332 | 270 | 275 | 205 | 150 | 165 | 474 | 220 | 11 | 28 | 237 | 237 | 120 | 63 | 85 | 6.0 | 267 | 66 | 48 | - | 110 | 16.5 Kg. |
| 4 x 1250 A | 496 | 332 | 270 | 275 | 205 | 150 | 185 | 474 | 220 | 11 | 28 | 237 | 237 | 120 | 63 | 85 | 7.0 | 287 | 86 | 48 | - | 111 | 18.8 Kg. |
| 4 x 1600 A | 496 | 362 | 270 | 275 | 205 | 150 | 185 | 474 | 220 | 11 | 28 | 237 | 237 | 120 | 80 | 80 | 15 | 282 | 86 | 48 | - | 115 | 23.0 Kg. |

All Dimension in MM.

Sirco 2000-3150A Direct Front Operation



Sirco 2000-3150A External Front Operation



Door Drilling for Interlock Assy. Mounting

| OVER ALL DIMENSION | | FIXING OF SW. | | CONNECTION TERMINAL | | SW. WT. | | | | | | | | | | | | |
|--------------------|-----|---------------|-----|---------------------|-----|---------|-----|-----|----|-----|-----|----|-----|----|----|----|-----|----------|
| Rating | A | B | C | D | E | F | J | K | M | P | S | T | U | V | W | Y | Y1 | Open Ex. |
| 4 x 2000 A | 498 | 450 | 361 | 365 | 281 | 235 | 474 | 330 | 28 | 120 | 125 | 8 | 350 | 62 | 48 | 88 | 223 | 38.0 Kg. |
| 4 x 2500 A | 498 | 450 | 361 | 365 | 281 | 235 | 474 | 330 | 28 | 120 | 125 | 10 | 350 | 62 | 48 | 89 | 228 | 39.5 Kg. |
| 4 x 3150 A | 498 | 500 | 361 | 365 | 281 | 235 | 474 | 330 | 28 | 120 | 150 | 15 | 375 | 62 | 48 | 82 | 232 | 58.0 Kg. |

All Dimension in MM.

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 Trichy | Trivandrum | Udaipur | Vapi | Varanasi | Vijayawada | Vizag

Due to continuous development, specifications and features are subject to change without prior notice.

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Cubicle Load Break Switch



63A - 3150A, 4 Pole, AC 23A, 415V

- Tested at CPRI for AC-23A duty
- Compact Design
- Quick make & quick break mechanism
- Unique safety handle with door pad locking
- Auxiliary contacts upto 2NO. 2NC.
- Suitable for DC-23A, 260V, application without any derating
- Available in open execution and sheet steel enclosure
- Bolt holders for easy installation



SHPL/CUBS/0108

FUNCTION

The SOCOMEC-HPL Cubicle Load Break Switch ensures making or breaking on load and security breaking of any low voltage electrical circuit. They are available in 4 Pole manual operation.

RANGE

The Cubicle load break switch : 63A-3150A 4 pole versions.

OPERATIONS

Two types of operations :

Direct : The pad lockable handle is mounted directly on the load break switch and lockable in 'OFF' position.

External : The pad lockable handle is mounted on an enclosure door of a front panel, lockable in 'OFF' position.

The external front operation ensures that the door is locked in 'ON' position.

APPROVALS / TESTS

Bureau Veritas, SASO Saudi Arabia, Loyd's Register of shipping. Tested at CPRI, Bhopal.

ELECTRICAL & MECHANICAL CHARACTERISTICS

| THERMAL CURRENT (40°C), I _{th} | 63A | 125A | 200A | 250A | 320A | 400A | 630A | 800A | 1000A | 1250A | 1600A | 2000A | 2500A | 3150A |
|--|-------|------|------|------|------|------------|------------|------------|-------------|-------------|-------------|--------------|--------------|--------------|
| Max. Normal Rating of Fuses | 63 | 125 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 | 1250 | 1250 | 2 x 800 | 2 x 1000 | 2 x 1250 |
| Insulation Voltage UI (V) | 750 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| Dielectric Strength (V) 50 Hz 1 min. | 4000 | 5000 | 5000 | 5000 | 5000 | 8000 | 8000 | 8000 | 8000 | 10000 | 10000 | 10000 | 10000 | 10000 |
| Impulse Voltage (KV) | 6 | 6 | 6 | 6 | 6 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| RATED OPERATIONAL CURRENT I_b (A) | | | | | | | | | | | | | | |
| 415 V AC : AC 23 A | 63 | 125 | 200 | 250 | 320 | 400 | 630 | 800 | 1000 | 1000 | 1000 | 1250 | 1250 | 1250 |
| 500 V AC : AC 23 A | 55 | 100 | 180 | 200 | 250 | 315 | 315 | 630 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| 260 V DC : DC 21 A | 63 | 125 | 200 | 250 | 320 | 400 | 630 | 800 | 1000 | 1250 | 1600 | 2000 | 2000 | 2000 |
| DC 22 A | 63 | 125 | 200 | 250 | 320 | 400 | 500 | 800 | 1000 | 1250 | 1250 | 1250 | 1250 | 1250 |
| DC 23 A | 63 | 125 | 180 | 200 | 250 | 400 | 500 | 800 | 1000 | 1250 | *1250 | *1250 | *1250 | *1250 |
| 440 V DC : DC 21 A | 63 | 125 | 200 | 250 | 320 | 400 | 500 | 630 | 1000 | 1250 | 1600 | 2000 | 2000 | 2000 |
| DC 22 A | 63 | 125 | 160 | 200 | 250 | 400 | 500 | 800 | 1000 | 1250 | 1250 | 1250 | 1250 | 1250 |
| DC 23 A | 63 | 125 | 180 | 200 | 250 | 400 | 500 | 800 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 |
| MOTOR POWER (KW) 415 V | | | | | | | | | | | | | | |
| 415 V AC without pre break Aux. Contact. | 30 | 63 | 80 | 132 | 180 | 200 | 220 | 450 | 580 | 580 | 550 | 710 | 710 | 710 |
| 500 V AC without pre break Aux. Contact. | 30 | 63 | 83 | 140 | 220 | 220 | 220 | 450 | 580 | 580 | 710 | 710 | 710 | 710 |
| 690 V AC without pre break Aux. Contact. | 22 | 55 | 55 | 90 | 150 | 150 | 150 | 185 | 400 | 400 | 475 | 475 | 750 | 750 |
| 415 V AC with pre break Aux. Contact. | 30 | 63 | 80 | 132 | 180 | 220 | 355 | 450 | 580 | 710 | 710 | 900 | 1100 | 1155 |
| 500 V AC with pre break Aux. Contact. | 30 | 80 | 80 | 160 | 220 | 280 | 355 | 550 | 710 | 710 | 900 | 900 | 1100 | 1100 |
| 690 V AC with pre break Aux. Contact. | 35 | 110 | 110 | 110 | 220 | 220 | 295 | 475 | 600 | 600 | 750 | 750 | 900 | 900 |
| Motor Reactive 415 V AC (kVAR) | 25 | 55 | 60 | 100 | 125 | 150 | 2 x 125 | 2 x 150 | 3 x 150 | 4 x 125 | 5 x 150 | 6 x 150 | 7 x 150 | 9 x 150 |
| OVERLOAD CAPACITY | | | | | | | | | | | | | | |
| Short Circuit Current with fuses (kArms) | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Fuse Rating | 63 | 125 | 200 | 250 | 315 | 400 | 630 | 800 | 1000 | 1250 | 2 x 800 | 2 x 1000 | 2 x 1250 | 2 x 1250 |
| Peak Short Circuit making Capacity (kArms) | 15 | 20 | 20 | 30 | 45 | 45 | 45 | 55 | 105 | 105 | 110 | 110 | 110 | 120 |
| Admissible Short time Current 1 sec. (kArms) | 5 | 7 | 7 | 9 | 13 | 13 | 13 | 26 | 50 | 50 | 50 | 50 | 50 | 55 |
| MAKING & BREAKING CHARACTERISTICS | | | | | | | | | | | | | | |
| Breaking Capacity (Arms) 415 V AC pf = 0.35 | 504 | 1000 | 1600 | 2000 | 2520 | 3200 | 5040 | 6400 | 8000 | 8000 | 8000 | 10000 | 10000 | 10000 |
| Making Capacity (Arms) 415 V AC pf = 0.35 | 630 | 1250 | 2000 | 2500 | 3150 | 4000 | 6300 | 8000 | 10000 | 10000 | 10000 | 12500 | 12500 | 12500 |
| ENDURANCE | | | | | | | | | | | | | | |
| Mechanical No. of Operations | 10000 | 8000 | 8000 | 8000 | 8000 | 5000 | 5000 | 4000 | 4000 | 4000 | 3000 | 3000 | 2500 | 2500 |
| Electrical No. of Operations | 2500 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| Operating Force (Nm) | 3.5 | 9.5 | 9.5 | 11 | 11 | 17 | 17 | 40 | 40 | 40 | 40 | 60 | 50 | 60 |
| CONNECTION | | | | | | | | | | | | | | |
| Min. Cu Cable/Bus bar size (mm ²) | 16 | 50 | 85 | 120 | 185 | 30 x 5 x 2 | 40 x 5 x 2 | 50 x 5 x 2 | 60 x 5 x 2 | 80 x 5 x 2 | 100 x 5 x 2 | 100 x 5 x 3 | 100 x 5 x 4 | 100 x 10 x 3 |
| Min. Al Cable/Bus bar size (mm ²) | 25 | 70 | 150 | 185 | 240 | 32 x 8 x 2 | 40 x 8 x 2 | 50 x 8 x 2 | 50 x 10 x 2 | 63 x 12 x 2 | 100 x 8 x 2 | 100 x 10 x 3 | 100 x 10 x 4 | - |

*Connect two poles in series

CONFORMITY TO STANDARDS

IS 13947-3, IEC 947 - IEC 664
BS 5419 - BS 3185
NFC 63130 - NFC 13100
VDE 0680 - NBN 63408
NFC 12100 (Security Rules, Emergency Sources)

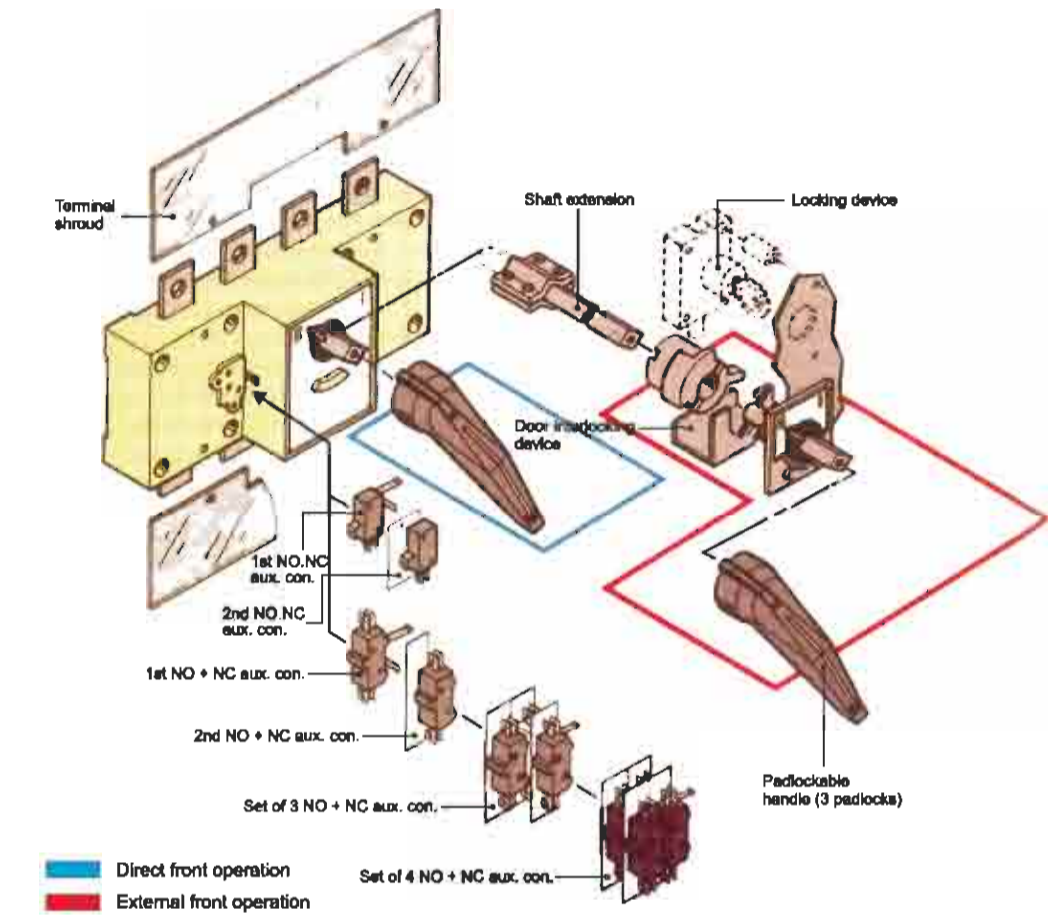
SALIENT FEATURES

- Very compact design.
- Switch frame made up of Fibre glass reinforced polyester track resistant material having high mechanical and dielectric strength. Stands the heat and humidity of the Tropics as well and any polluted environment of any process industry.

- Quick make & Quick Break
- Bounce free contacts at the time of make or break.
- AC - 23 A duty as per 13947 (Part 3).
- Suitable for DC-23, 260 V application without any derating.
- Any one Pole can be neutral; All four Poles of same capacity.
- Provision for mounting Auxiliary Contacts upto 2 NO, 2 NC.
- Unique safety handle with built in door Padlock facility.
- Available in Open Execution/Sheet Enclosure.
- External Padlock in any one of 'ON' or 'OFF' position.
- Shaft extension for 125A to 3150A.
- DIN rail mounting for 63A & 100A
- Visual indication of moving contacts position (ON or OFF).

ACCESSORIES AND AUXILIARIES

The described accessories relate to the switch with 4 poles. Please consult us for 8 poles.



Direct front operation
External front operation

LOCKING DEVICE

- Application
Locking of front in 'O' position
-by padlock (not supplied) originally integrated in the handle (fig. 1).
-by lock (not included).
- Load break switches are compatible with castle lock (optional). Such an arrangement with two or three switches cater to specific application.

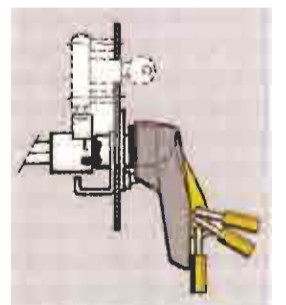


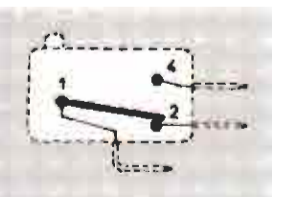
Fig. 1 - Padlocking device

TERMINAL SHROUD

- Application
Protection against direct contacts with the incoming and or outgoing terminals or with the connection points.

AUXILIARY CONTACTS NO.NC

- Application
Signalisation of 'O' and 'I' positions and pre-break up to 2NO.2NC auxiliary contacts.
- Connection to the operation circuit by 6.35 mm fast-on connectors.
- Electrical ENDURANCE 50,000 cycles.



Electrical Principle NO.NC