

## DATA SHEET: TEMBREAK 2 S800-RE MCCB

Codigó Larce: 0403010043

MCCB Electrical Characteristics to IEC 60947-2, EN 60947-2, JIS C 8201-2-1 ANN. 1, AS/NZS 3947-2, NEMA AB-1

| Frame reference                                  | Quantity                 | Unit             | Condition                                                              | TB2 1000                                      |
|--------------------------------------------------|--------------------------|------------------|------------------------------------------------------------------------|-----------------------------------------------|
| Max In (A) of Frame                              |                          |                  |                                                                        | 800                                           |
| Model                                            |                          |                  |                                                                        | S800                                          |
| Number of Poles                                  |                          |                  |                                                                        | 3, 4                                          |
| Type                                             |                          |                  |                                                                        | RE                                            |
| Nominal current ratings                          |                          |                  |                                                                        |                                               |
|                                                  | $I_n$                    | (A)              | 50°C                                                                   | 630<br>800                                    |
| Electrical characteristics                       |                          |                  |                                                                        |                                               |
| Rated operational voltage                        | $U_e$                    | (V)              | AC 50/60 Hz<br>DC                                                      | 690<br>-                                      |
| Rated insulation voltage                         | $U_i$                    | (V)              |                                                                        | 800                                           |
| Rated impulse withstand voltage                  | $U_{imp}$                | (kV)             |                                                                        | 8                                             |
| Ultimate breaking capacity<br>(IEC, JIS, AS/NZS) | $I_{cu}$                 | (kA)             | 690V AC<br>525V AC<br>440V AC<br>400/415V AC<br>220/240V AC<br>250V DC | 25 <sup>④</sup><br>35<br>65<br>70<br>100<br>- |
| Service breaking capacity<br>(IEC, JIS, AS/NZS)  | $I_{cs}$                 | (kA)             | 690V AC<br>525V AC<br>440V AC<br>400/415V AC<br>220/240V AC<br>250V DC | 20 <sup>④</sup><br>30<br>50<br>50<br>75<br>-  |
| Rated breaking capacity (NEMA)                   |                          | (kA)             | 480V AC<br>240V AC                                                     | 35<br>100                                     |
| Rated short-time withstand current               | $I_{cw}$                 | (kA)             | 0.3 Seconds                                                            | 10                                            |
| Protection                                       |                          |                  |                                                                        |                                               |
| Adjustable thermal, adjustable magnetic          |                          |                  |                                                                        | ■                                             |
| Fixed thermal, fixed magnetic                    |                          |                  |                                                                        |                                               |
| Microprocessor                                   |                          |                  |                                                                        |                                               |
| Utilisation category                             |                          |                  |                                                                        | B                                             |
| Installation                                     |                          |                  |                                                                        |                                               |
| Front connection (FC)                            |                          |                  |                                                                        | ■                                             |
| Extension bar (FB)                               |                          |                  |                                                                        | •                                             |
| Cable clamp (FW)                                 |                          |                  |                                                                        | • <sup>①</sup>                                |
| Rear connection (RC)                             |                          |                  |                                                                        | •                                             |
| Plug-in (PM)                                     |                          |                  |                                                                        | •                                             |
| DIN rail mounting (DA)                           |                          |                  |                                                                        | -                                             |
| Dimensions                                       | height                   | (mm)             |                                                                        | 273                                           |
|                                                  | width                    | (mm)             | 3 pole<br>4 pole                                                       | 210<br>280                                    |
|                                                  | depth                    | (mm)             |                                                                        | 103                                           |
| Weight                                           | weight                   | (kg)             | 3 pole<br>4 pole                                                       | <sup>②</sup><br><sup>③</sup>                  |
| Operation                                        |                          |                  |                                                                        |                                               |
| Direct Opening Action                            |                          |                  |                                                                        | ■                                             |
| Toggle operation                                 |                          |                  |                                                                        | ■                                             |
| Door mounted (HS) / Breaker mounted handle (HB)  |                          |                  |                                                                        | •                                             |
| Motor operation (MC)                             |                          |                  |                                                                        | •                                             |
| Endurance                                        | Electrical<br>Mechanical | cycles<br>cycles | 690V AC                                                                | 4,000<br>10,000                               |

① 630A only

② 8.7kg 630A, 9.1kg 800A

③ 11.9kg 630A, 12.3kg 800A

④ MCCB cannot be used in IT systems at this voltage

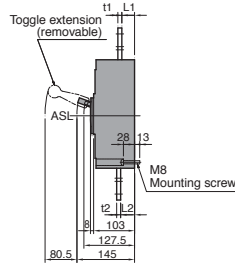
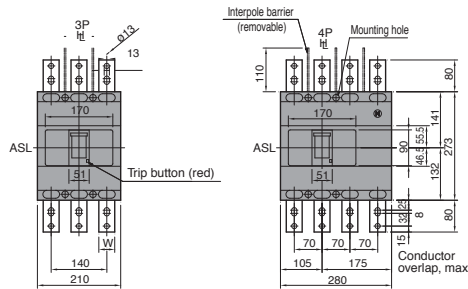
■ Standard • Optional - Not Available

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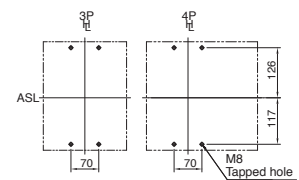
## Outline Dimensions S800-RE

ASL: Arrangement Standard Line H: Handle Frame Centre Line

Front connected with extension bars (optional)

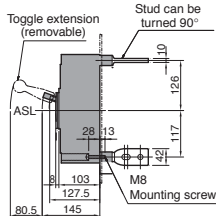


Drilling plan (front view)

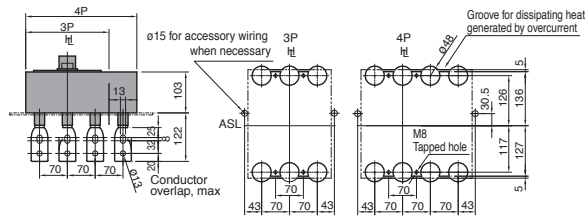


| Breaker Type     | Rated Current | t1 | t2 | L1 | L2 | W  |
|------------------|---------------|----|----|----|----|----|
| S800-CJ, S800-NJ | 630A          | 8  | 8  | 32 | 34 | 40 |
| S800-RJ, S800-NN | 800A          | 10 | 10 | 32 | 35 | 40 |
| S800-NE, S800-RE | 630A          | 8  | 8  | 32 | 36 | 40 |
|                  | 800A          | 10 | 10 | 32 | 36 | 40 |

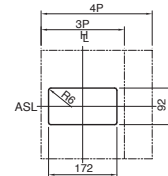
Rear connected



Drilling plan (front view)



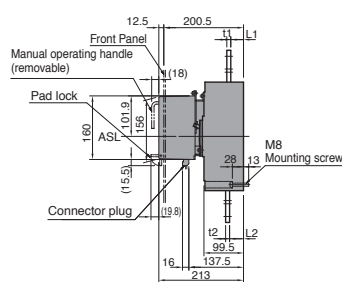
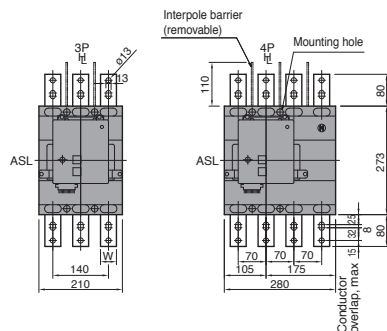
Panel cutout (front view)



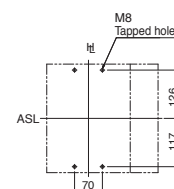
Panel cutout dimensions shown give an allowance of 1.0mm around the handle escutcheon.

Note: Studs are factory installed in horizontal direction both on the line and load sides

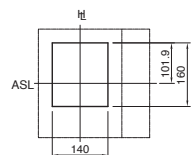
Front connected with Motor Operator



Drilling plan (front view)

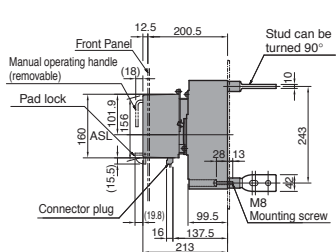


Panel cutout (front view)

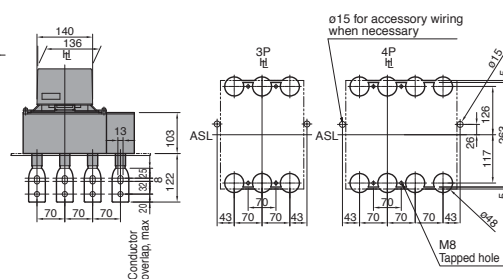


Panel cutout dimensions shown give an allowance of 1.5mm around motor operator.

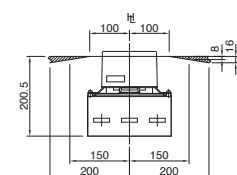
Rear connected with Motor Operator



Drilling plan (front view)



Panel hinge position (hatching area)  
(bottom view)



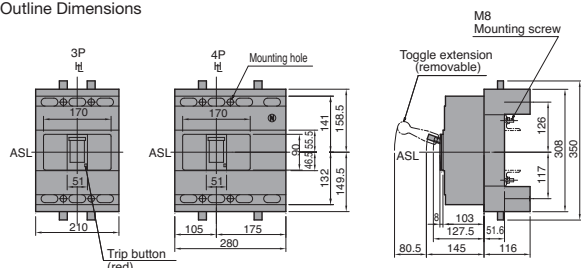
Note: Studs are factory installed in horizontal direction both on the line and load sides.

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### Outline Dimensions S800-RE Plug in Version

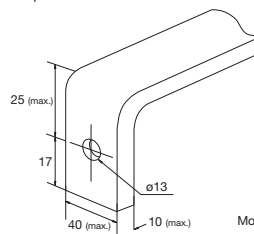
ASL: Arrangement Standard Line H: Handle Frame Centre Line

## Outline Dimensions



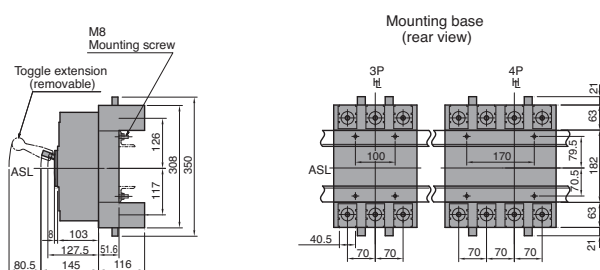
### Termination of Busbar

### Preparation of conductor

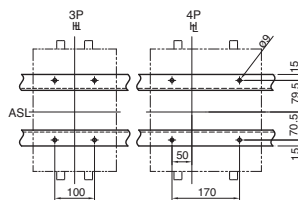


Mounting screw M12X25 max. Hex. sec. head bolt.

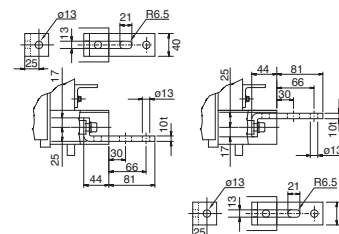
### Mounting on a support or rails



Drilling plan  
(front view)

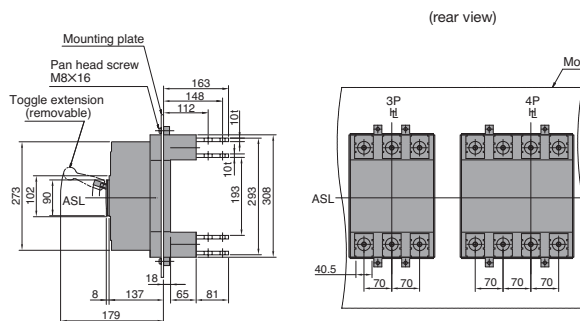


Detail of connecting part  
Oriented for rear access

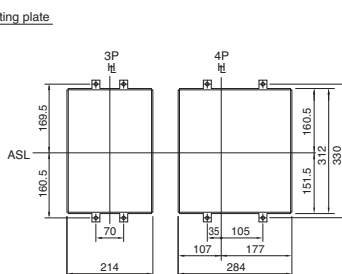


Terminal bars should be connected alternately on adjacent poles.

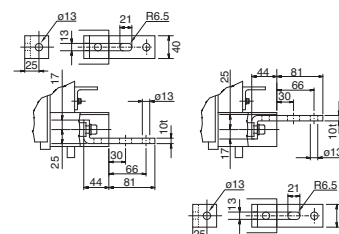
### Mounting through the backplate (shown with optional connection bars oriented for rear access)



Drilling plan (front view)

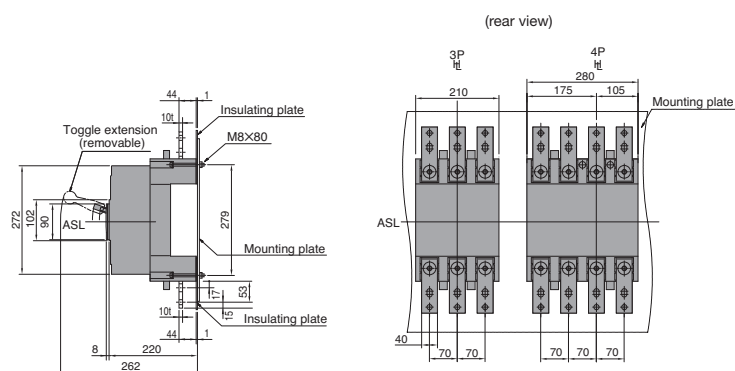


Detail of connecting part  
Oriented for rear access

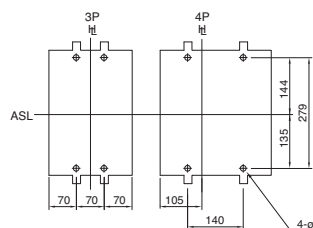


Terminal bars should be connected alternately on adjacent poles.

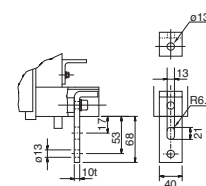
**Mounting on the backplate** (optional connection bars must be oriented for front access)



Drilling plan (front view)



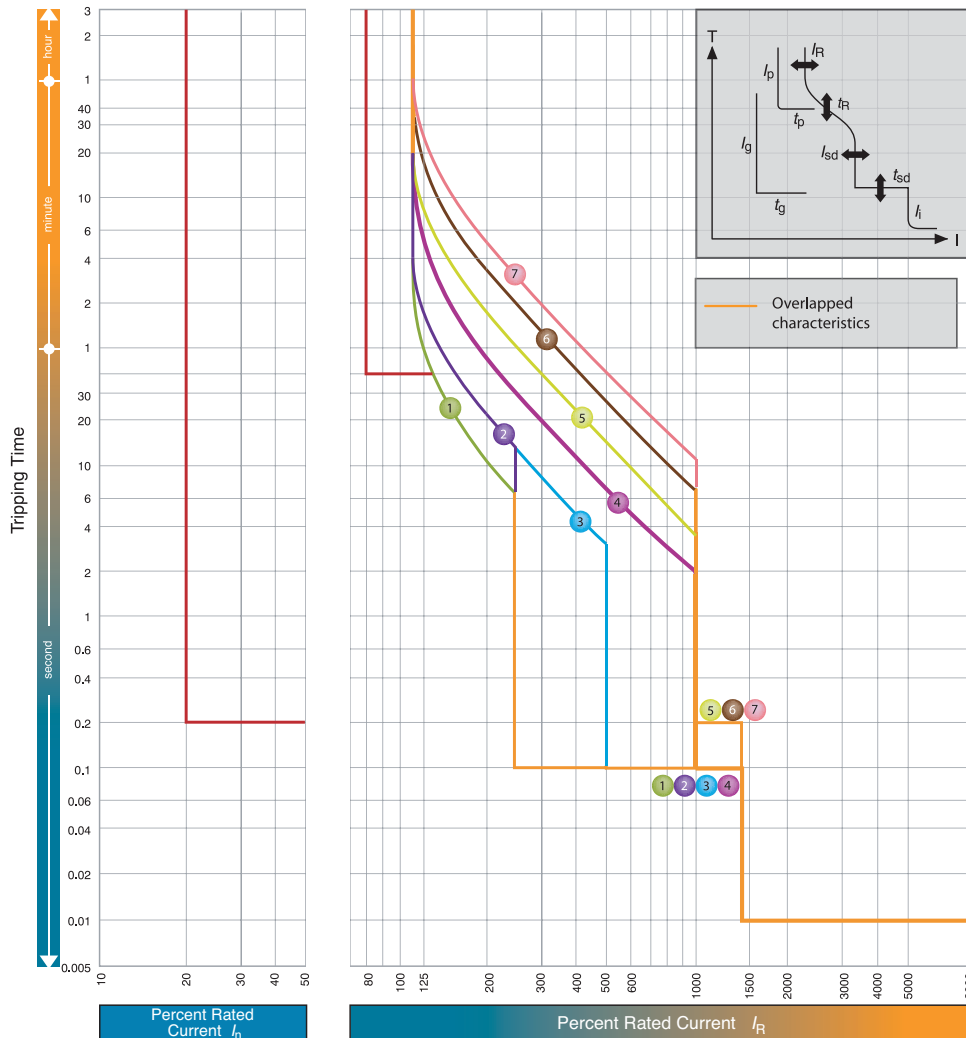
Detail of connecting part  
Oriented for front access



## DATA SHEET: TEMBREAK 2 S800-RE MCCB

### Time/Current Characteristic Curves

#### S800-RE



$I_n = 800A; 630A$

|          |               | $I_R$ (A)           |          |                               |  |     |     |      |     |                 |      |     |    |
|----------|---------------|---------------------|----------|-------------------------------|--|-----|-----|------|-----|-----------------|------|-----|----|
|          |               | LTD Pick-up current | $I_R$    | x/n                           |  | 0.4 | 0.5 | 0.63 | 0.8 | 0.9             | 0.95 | 1.0 |    |
|          |               | Characteristics     |          | No.                           |  | 1   | 2   | 3    | 4   | 5               | 6    | 7   |    |
| Standard | LT            | $t_R$               | (s)      | 11                            |  | 21  |     | 21   |     | 5               | 10   | 19  | 29 |
|          |               |                     |          | at 200% x $I_R$               |  |     |     |      |     | at 600% x $I_R$ |      |     |    |
|          | ST            | $I_{sd}$            | x/ $I_R$ | 2.5                           |  |     | 5   |      | 10  |                 |      |     |    |
|          |               | $t_{sd}$            | (s)      | 0.1                           |  |     |     |      |     | 0.2             |      |     |    |
|          | INST          | $I_i$               | x/ $I_R$ | 14(Max: 12 x $I_n$ ) Note (1) |  |     |     |      |     |                 |      |     |    |
| Option   | PTA           | $I_p$               | x/ $I_R$ | 0.8                           |  |     |     |      |     |                 |      |     |    |
|          |               | $t_p$               | (s)      | 40                            |  |     |     |      |     |                 |      |     |    |
|          | GF<br>Note(3) | $I_g$               | x/ $I_n$ | 0.2                           |  |     |     |      |     |                 |      |     |    |
|          |               | $t_g$               | (s)      | 0.2                           |  |     |     |      |     |                 |      |     |    |
|          | NP            | $I_N$               | x/ $I_R$ | 1.0/0.5 Note(2)               |  |     |     |      |     |                 |      |     |    |
|          |               | $t_N$               | (s)      | $t_N=t_R$                     |  |     |     |      |     |                 |      |     |    |

#### Note

(1)  $I_i$  max. =  $12 \times I_n$ . (2)  $1.0 \times I_R$  or  $0.5 \times I_R$  can be selected. Characteristic of neutral protection ( $t_N$  vs.  $I_N$ ) is identical to characteristic of phase protection ( $t_R$  vs.  $I_R$ ). (3) When you specify GF on MCCBs with 3 poles the terminal block is automatically fitted to connect with the external neutral CT for 3 phases 4 wires system.