

# RATINGS AND SPECIFICATIONS

## MCCB Electrical characteristics to IEC 60947-2, EN 60947-2 (including Annex H for use in IT systems) - Rev.2 - 04.09.25

| Frame                                               | Quantity               | Unit   | Condition   | 1250   |
|-----------------------------------------------------|------------------------|--------|-------------|--------|
| Model                                               |                        |        |             | VS1250 |
| Number of Poles                                     |                        |        |             | 3      |
| Type                                                |                        |        |             | NEP    |
| <b>Nominal current ratings</b>                      |                        |        |             |        |
|                                                     | $I_n$                  | (A)    | 50°C        | 1250 ① |
| <b>Electrical characteristics</b>                   |                        |        |             |        |
| Rated operational voltage                           | $U_e$                  | (V)    | AC 50/60 Hz | 800    |
| Rated insulation voltage                            | $U_i$                  | (V)    |             | 1100   |
| Rated impulse withstand voltage                     | $U_{imp}$              | (kV)   |             | 8      |
| Ultimate breaking capacity<br>(IEC, JIS, AS/NZS)    | $I_{cu}$               | (kA)   | 800V AC     | 30     |
| Service breaking capacity<br>(IEC, JIS, AS/NZS)     | $I_{cs}$               | (kA)   | 800V AC     | 20     |
| Rated short-time withstand current                  | $I_{cw}$               | (kA)   | 0.3 Seconds | -      |
| <b>Protection</b>                                   |                        |        |             |        |
| Adjustable thermal, adjustable magnetic             |                        |        |             |        |
| Fixed thermal, fixed magnetic                       |                        |        |             |        |
| Microprocessor                                      |                        |        |             | ■      |
| Utilisation category                                |                        |        |             | A      |
| <b>Installation</b>                                 |                        |        |             |        |
| Front connection (FC)                               |                        |        |             | -      |
| Extension bar (FB)                                  |                        |        |             | ■      |
| Cable clamp (FW)                                    |                        |        |             | -      |
| Rear connection (RC)                                |                        |        |             | -      |
| Plug-in (PM)                                        |                        |        |             | -      |
| Draw- out (DR)                                      |                        |        |             | -      |
| DIN rail mounting (DA)                              |                        |        |             | -      |
| Dimensions                                          | h                      | (mm)   |             | 370    |
|                                                     | w                      | (mm)   | 3 pole      | 210    |
|                                                     | d                      | (mm)   |             | 120    |
| Weight                                              | W                      | (kg)   | 3 pole      | 19.8   |
| <b>Operation</b>                                    |                        |        |             |        |
| Direct Opening Action                               |                        |        |             | ■      |
| Toggle operation                                    |                        |        |             | ■      |
| Door mounted (HS, HP) / Breaker mounted handle (HB) |                        |        |             | •      |
| Motor operation (MC)                                |                        |        |             | •      |
| Endurance                                           | Electrical             | cycles | 1100V AC    | 500    |
|                                                     | Mechanical             | cycles |             | 5,000  |
| Accessories installation                            | Field-installation     |        |             | Yes    |
|                                                     | Installed with factory |        |             | Yes    |

■ Standard    • Optional    – Not Available

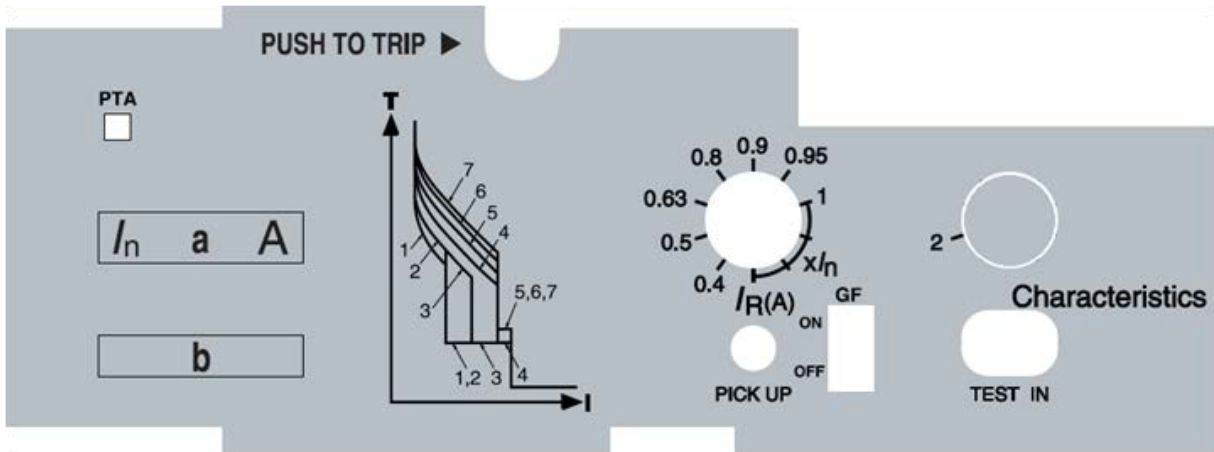
### Notes

① : Max. rating 1125A at 50°C for Rear and Plug-in connection.

# OPERATING CHARACTERISTICS

## ELECTRONIC PROTECTION (STANDARD TYPE)

### Adjustment Dials



The adjustment dial sets the rated current to match the conductor rating. Characteristic is fixed at 2.

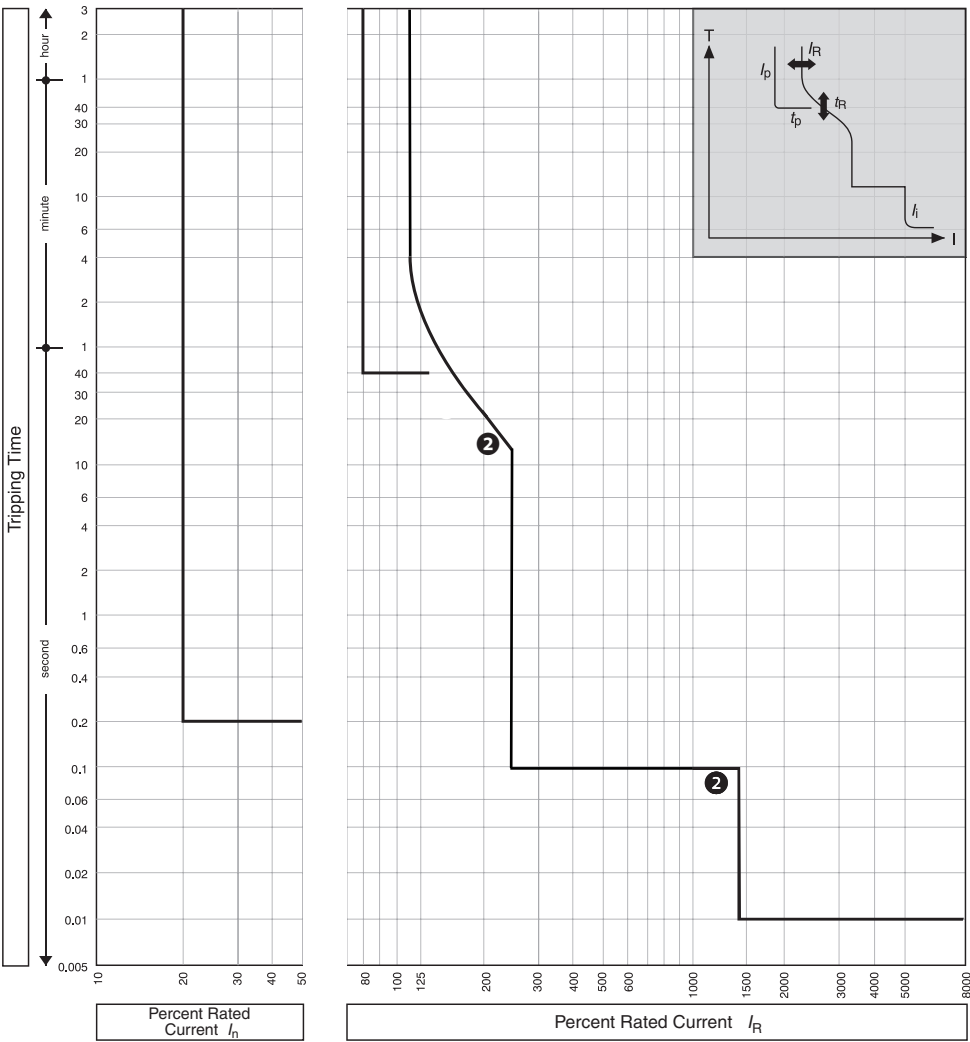
### Tolerances of Characteristics

| Characteristics  |          | Tolerance                                                                      |
|------------------|----------|--------------------------------------------------------------------------------|
| Long Time Delay  | $I_R$    | Tripping when $(I_R \times 1.05) < \text{load current} \leq (I_R \times 1.25)$ |
|                  | $t_R$    | $\pm 20\%$                                                                     |
| Short Time Delay | $I_{sd}$ | $\pm 15\%$                                                                     |
|                  | $t_{sd}$ | Total clearing time +50ms, resettable time -20ms                               |
| Instantaneous    | $I_i$    | $\pm 20\%$                                                                     |

# OPERATING CHARACTERISTICS

## ELECTRONIC CHARACTERISTICS (STANDARD TYPE)

VS1250-NEP



$$I_n = 1250A$$

|          |      | $I_R$ (A)           |         |                                  |     |     |      |     |     |      |     |
|----------|------|---------------------|---------|----------------------------------|-----|-----|------|-----|-----|------|-----|
|          |      | LTD Pick-up current | $I_R$   | $x/I_n$                          | 0.4 | 0.5 | 0.63 | 0.8 | 0.9 | 0.95 | 1.0 |
|          |      | Characteristics     |         | No.                              | 2   |     |      |     |     |      |     |
| Standard | LT   | $t_R$               | (s)     | 21                               |     |     |      |     |     |      |     |
|          |      |                     |         | at 200% x $I_R$                  |     |     |      |     |     |      |     |
|          | ST   | $I_{sd}$            | $x/I_R$ | 2.5                              |     |     |      |     |     |      |     |
|          |      | $t_{sd}$            | (s)     | 0.1                              |     |     |      |     |     |      |     |
|          | INST | $I_i$               | $x/I_R$ | 14(Max: 12 x $I_n$ )    Note (1) |     |     |      |     |     |      |     |

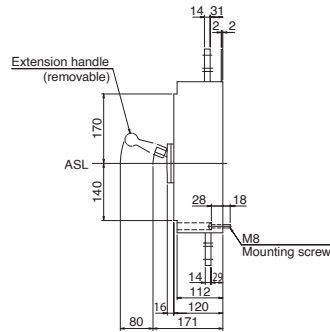
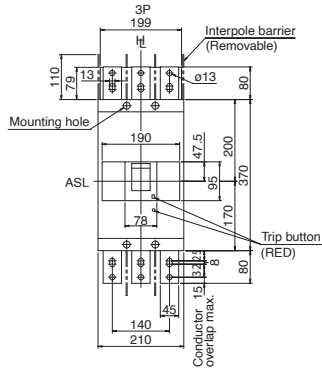
**Note:**

(1)  $I_i$  max. = 12 x  $I_n$ .

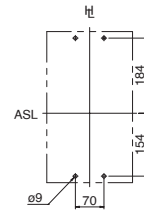
## VS1250-NEP

ASL : Arrangement Standard Line     $\text{CL}$  : Handle Centre Line     $\text{HL}$  : Handle Frame Centre Line

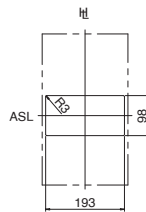
Front connected



Drilling plan (front view)

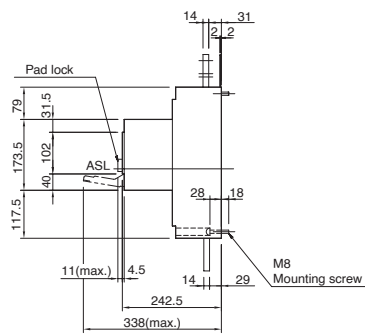
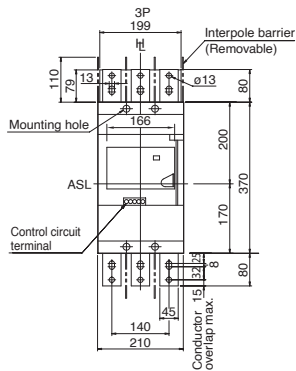


Panel cutout (front view)

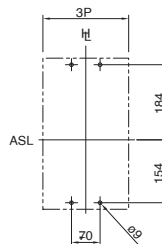


Panel cutout dimensions shown give an allowance of 1.5mm around the handle escutcheon.

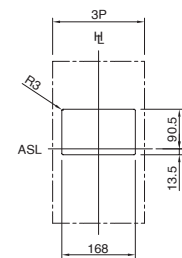
Front connected with Motor Operator



Drilling plan (front view)



Panel cutout (front view)



Panel cutout dimensions shown give an allowance of 1.0mm around motor operator.