



HMD399T

### MCB 3P 15kA D-80A 4.5M

#### Technical Features

##### Architecture

|              |    |
|--------------|----|
| Type of pole | 3P |
| Curve        | D  |

##### Voltage

|                                           |             |
|-------------------------------------------|-------------|
| Rated operational voltage $U_e$           | 400 - 415 V |
| Type voltage supply                       | AC          |
| Rated insulation voltage $U_i$            | 500 V       |
| Rated impulse withstand voltage $U_{imp}$ | 6000 V      |

##### Frequency

|           |            |
|-----------|------------|
| Frequency | 50 - 60 Hz |
|-----------|------------|

##### Installation, mounting

|                                               |                |
|-----------------------------------------------|----------------|
| Nominal tightening torque                     | 3.5 - 5.0 Nm   |
| Type of top connection for modular devices    | Screw terminal |
| Type of bottom connection for modular devices | Screw terminal |

##### Electric current

|                                                                                        |         |
|----------------------------------------------------------------------------------------|---------|
| Rated current                                                                          | 80 A    |
| Rated short-circuit breaking capacity $I_{cn}$ under 230 V AC according to IEC 60898-1 | 15 kA   |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 230 V AC IEC 60947-2     | 15 kA   |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 400 V AC IEC 60947-2     | 15 kA   |
| Rated current at -20°C                                                                 | 112 A   |
| Rated current -15°C                                                                    | 109 A   |
| Rated current -10°C                                                                    | 106 A   |
| Rated current -5°C                                                                     | 102 A   |
| Rated current at 0°C                                                                   | 99.20 A |
| Rated current 5°C                                                                      | 96 A    |
| Rated current 10°C                                                                     | 92.80 A |
| Rated current 15°C                                                                     | 89.60 A |
| Rated current at 20°C                                                                  | 86.40 A |
| Rated current 25°C                                                                     | 83.20 A |
| Rated current 30°C                                                                     | 80 A    |
| Rated current 35°C                                                                     | 77.60 A |
| Rated current at 40°C                                                                  | 75.10 A |
| Rated current at 45°C                                                                  | 72.60 A |
| Rated current at 50°C                                                                  | 70 A    |
| Rated current 55°C                                                                     | 67.20 A |
| Rated current 60°C                                                                     | 64.30 A |

##### Main electrical attributes

|                                                                            |       |
|----------------------------------------------------------------------------|-------|
| Rated short-circuit breaking capacity $I_{cn}$ AC according to IEC 60898-1 | 15 kA |
|----------------------------------------------------------------------------|-------|

##### Installation, mounting

|                                         |                |
|-----------------------------------------|----------------|
| Nominal tightening torque down terminal | 3.60 - 3.60 Nm |
| Nominal tightening torque top terminal  | 3.60 - 3.60 Nm |

##### Power

|                              |         |
|------------------------------|---------|
| Total power loss under $I_N$ | 20.32 W |
|------------------------------|---------|

##### Endurance

|                                        |       |
|----------------------------------------|-------|
| Electric endurance in number of cycles | 4000  |
| Number of mechanical operations        | 20000 |

##### Connection

|                                                                        |                        |
|------------------------------------------------------------------------|------------------------|
| Cross-section of input and output with screws, for massive conductors  | 1 - 70 mm <sup>2</sup> |
| Cross-section of input and output with screws, for flexible conductors | 1 - 50 mm <sup>2</sup> |

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**Connection**

|                                  |                    |
|----------------------------------|--------------------|
| Cross-section flexible conductor | 50 mm <sup>2</sup> |
| Cross-section rigid conductor    | 70 mm <sup>2</sup> |

**Use conditions**

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3                |
| Air humidity protection                                  | For all climates |
| Operating temperature                                    | -25 - 70 °C      |

**Capacity**

|                   |      |
|-------------------|------|
| Number of modules | 4.50 |
|-------------------|------|

**Connectivity**

|                                               |                  |
|-----------------------------------------------|------------------|
| Top connection alignment for modular devices  | Aligned terminal |
| Down connection alignment for modular devices | Aligned terminal |

**Dimensions**

|        |       |
|--------|-------|
| Height | 90 mm |
| Width  | 80 mm |
| Depth  | 70 mm |

**Sustainability**

|                 |     |
|-----------------|-----|
| REACH-SVHC free | Yes |
| RoHS conform    | Yes |