Product data sheet MSN220



MSN220

MCB 2P 6kA C-20A 2M

Architecture

| Neutral position | without neutral |
|--|-------------------------------|
| Number of poles | 2 P |
| Type of pole | 2 P |
| Fixing mode | DIN rail type O (symmetrical) |
| Curve | С |
| Functions | |
| Concurrently switching N-neutral | no |
| Compatibility | |
| Compatible with DIN rail mounting | yes |
| Controls and indicators | |
| With Contact position indicator | no |
| With fault indicator | no |
| Connectivity | |
| Top connection alignement for modular devices | Aligned terminal |
| Bottom connection alignement for modular devices | Aligned terminal |
| Main electrical features | |
| Rated operational voltage Ue | 415 V |
| Type of supply voltage | AC |
| Voltage | |
| Rated insulation voltage | 500 V |
| Max operating voltage | 415 V |
| Rated impulse withstand voltage | 4000 V |
| Electric current | |
| Rated current | 20 A |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 6 kA |
| min/maxi threshold value of the AC thermal operation | n 1,13 / 1,45 In |

| 60898-T | |
|--|----------------|
| min/maxi threshold value of the AC thermal operation | 1,13 / 1,45 ln |
| Magnetic regulating currrent | 5 / 10 ln |
| | |

| Technical Properties | |
|--|------|
| Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1 | 6 kA |
| Rated short circuit breaking capacity Icn under 415V AC according IEC 60898-1 | 6 kA |
| Rated service breaking capacity Ics under 415V AC according IEC 60898-1 | 6 kA |

Electric current / temperature

| Rating current -25°C | 27,36 A |
|----------------------|---------|
| Rating current -20°C | 26,7 A |
| Rating current -15°C | 26,03 A |
| Rating current -10°C | 25,4 A |
| Rating current -5°C | 24,71 A |
| Rating current 0°C | 24,05 A |
| Rating current 5°C | 23,39 A |
| Rating current 10°C | 22,73 A |
| Rating current 15°C | 22,07 A |
| Rating current 20°C | 21,41 A |
| Rating current 25°C | 20,75 A |
| Rating current 30°C | 20 A |
| Rating current 35°C | 19,42 A |
| Rating current 40°C | 18,76 A |
| Rating current 45°C | 18,1 A |
| Rating current 50°C | 17,5 A |
| Rating current 55°C | 16,78 A |
| Rating current 60°C | 16,12 A |
| Rating current 65°C | 15,46 A |
| Rating current 70°C | 14,8 A |
| | |

Current correction factors

| Correction factor of rating current for 2 devices placed 1 side-by-side | |
|---|--|
| Correction factor of rating current for 3 devices placed 0,95 side-by-side | |
| Correction factor of rating current for 4 and 5 devices 0,9 placed side-by-side | |
| Correction factor of rating current for 6 devices placed 0,85 side-by-side | |
| Frequency | |

| Frequency |
|-----------|
|-----------|

Power

| Maximum power loss per pole according to the | 4,5 W |
|--|--------|
| product standard | |
| Total power loss under IN | 5,57 W |
| Power loss per pole at In | 2,85 W |

50 to 60 Hz

Endurance

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

Dimensions

| Depth of installed product | 70 mm | |
|-----------------------------|-------|--|
| Height of installed product | 83 mm | |
| Width of installed product | 35 mm | |

Installation, mounting

| Type of top connection for modular devices | with screw |
|---|------------|
| Tightening torque | 2,8Nm |
| Type of bottom rail clip for modular devices | plastic |
| Type of Bottom Connection for modular devices | Blconnect |
| Top removability for modular devices | no |
| Bottom removability for modular devices | yes |
| 360° product mounting position | yes |

Connection

| Connection cross-section at output with screw, for flexible conductor | 1 / 25 mm² |
|---|------------|
| Connection cross-section at output with screw, for massive conductor | 1 / 35 mm² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 35 mm² |
| Connection cross-section of the access with screws, with flexible conductor | 1 / 25 mm² |
| Downstream cage clamp delivery status | opened |
| Upstream cage clamp delivery status | opened |
| Nominal tightening torque bottom terminal | 2,8 Nm |
| Nominal tightening torque top terminal | 2,8 Nm |

Equipment

| Can be accessorized | yes |
|---------------------------------------|-----|
| Accept terminal cover | no |
| With transparent product label holder | yes |

Standards

| Standard text | IEC 60898-1, AS/NZS 60898-1 |
|-------------------------|-----------------------------|
| European directive WEEE | not concerned |

Safety

| Protection index IP | IP20 | |
|---------------------|------|--|
| | | |

Use conditions

| Operating temperature | -25 70 °C | |
|--|-----------|--|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 | |
| Class of energy limitation I ² t | 3 | |
| Altitude | 2000 m | |
| Storage/transport temperature | -25 80 °C | |

temperatur