

MCB 3P 10kA C-20A 3M

Similar image (Picture shows NT304C)

Architecture

| Number of protected poles | 3 |
|-------------------------------------------------------------------|-------------------------------|
| Number of poles | 3 P |
| Type of pole | 3 P |
| Fixing mode | DIN rail type O (symmetrical) |
| Curve | С |
| Functions | |
| Concurrently switching N-neutral | no |
| Connectivity | |
| Top connection alignement for modular devices | Aligned terminal |
| Bottom connection alignement for modular devices | Aligned terminal |
| Main electrical features | |
| Rated short circuit breaking capacity Icn AC according IEC60898-1 | g 10 kA |
| Rated operational voltage Ue | 415 V |
| Type of supply voltage | AC |
| Frequency | 50/60 Hz |
| Voltage | |
| Rated insulation voltage | 500 V |
| Rated impulse withstand voltage | 4000 V |
| Electric current | |
| Rated current | 20 A |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 7,5 kA |
| min/maxi threshold value of the AC thermal operation | 1,13 / 1,45 ln |
| Magnetic regulating currrent | 5 / 10 ln |
| Rated short circuit breaking capacity Icn under 400V | 10 kA |
| AC according IEC60898-1 | |
| Rated short circuit breaking capacity Icn under 415V | 10 kA |
| AC according IEC 60898-1 | |



| Technical Properties | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Rated service breaking capacity Ics under 400V AC | 7,5 kA |
| according IEC 60898-1 | |
| Rated service breaking capacity Ics under 415V AC | 7,5 kA |
| according IEC 60898-1 | |
| | |
| Electric current / temperature | |
| Rating current -25°C | 24,6 A |
| Rating current -20°C | 24,3 A |
| Rating current -15°C | 23,9 A |
| Rating current -10°C | 23,5 A |
| Rating current -5°C | 23,1 A |
| Rating current 0°C | 22,7 A |
| Rating current 5°C | 22,2 A |
| Rating current 10°C | 21,8 A |
| Rating current 15°C | 21,4 A |
| Rating current 20°C | 20,9 A |
| Rating current 25°C | 20,5 A |
| Rating current 30°C | 20 A |
| Rating current 35°C | 19,5 A |
| Rating current 40°C | 19 A |
| Rating current 45°C | 18,5 A |
| Rating current 50°C | 18 A |
| Rating current 55°C | 17,5 A |
| Rating current 60°C | 16,9 A |
| Rating current 65°C | 16,4 A |
| Rating current 70°C | 15,9 A |
| | |
| Current correction factors | |
| - | 1 1 |
| Correction factor of rating current for 2 devices placed | <u></u> |
| Correction factor of rating current for 2 devices placed side-by-side | |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed | |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side | d 0,95 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices | d 0,95 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side | 0,9 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed | 0,9 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side | d 0,95 0,9 d 0,85 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz | d 0,95 0,9 d 0,85 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz | 1 0,95 0,9 1 0,85 1,1 1,2 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz | d 0,95 0,9 d 0,85 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz | 1 0,95 0,9 d 0,85 1,1 1,2 1,5 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency | 10,95 0,9 10,85 1,1 1,2 1,5 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz | 1 0,95 0,9 d 0,85 1,1 1,2 1,5 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency | 10,95 0,9 10,85 1,1 1,2 1,5 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency Frequency | 10,95 0,9 10,85 1,1 1,2 1,5 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency Frequency Power | 1 0,95 0,9 d 0,85 1,1 1,2 1,5 1 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency Power Total power loss under IN | 10,95 0,9 d 0,85 1,1 1,2 1,5 1 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency Power Total power loss under IN Power loss per pole at In Endurance | 10,95 0,9 d 0,85 1,1 1,2 1,5 1 |
| Correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with 60 Hz Frequency Power Total power loss under IN Power loss per pole at In | 10,95 0,9 10,85 1,1 1,2 1,5 1 50 to 60 Hz 8,7 W 2,93 W |

| _ | | | | | | | | |
|---|---|---|---|----|----|---|----|----|
| D | ı | m | e | ns | SI | O | ns | \$ |

| Depth of installed product | 70 mm |
|-----------------------------|---------|
| Height of installed product | 83 mm |
| Width of installed product | 52,5 mm |

Installation, mounting

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

Connection

| Connection cross-section of input and output with | 1 / 35 mm² |
|---------------------------------------------------|------------|
| screws, for massive conductors | |
| Connection cross section of access and exit with | 1 / 25 mm² |
| screws, for flexible conductor | |
| Type of connection | with screw |

Standards

| Standard text | IFC 60898-1 AS/NZS 60898-1 |
|---------------|----------------------------|

Safety

| Protection index IP | IP20 | |
|------------------------|-------|--|
| 1 TO LEGITOTT THACK IT | 11 20 | |

Use conditions

| Operating temperature | -25 70 °C |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Class of energy limitation I2t | 3 |
| Altitude | 2000 m |
| Air humidity protection | for all climates |
| Storage/transport temperature | -25 80 °C |