

DATASHEET

Molded Case Circuit Breakers



Main Features

Product code	: 12736175
Reference	: DWB100JH20-3DX
Product line	: DWB
Frame size	: 100
Product type	: Molded case circuit breaker
Application type	: Distribution
Rated nominal	: 20 A
Number of poles	: 3

Basic Data

Minimum rated line frequency	: 50 Hz
Maximum rated line frequency	: 60 Hz
Line frequency type	: a.c.
UL rated voltage	: 480Y277V
Magnetic current to DWB	: 300A
Breaking capacity code	: J
Continuous current rating	: 100 A

Short-circuit breaking capacity I (UL 489):

Voltage	Interrupting Capacity (kA)
240V c.a.	50.0
480Y/277V c.a.	14.0

Trip unit code	: DX
Trip unit type	: Fixed thermal and magnetic
Neutral pole protection	: No protection
Ground fault protection	: None
Power dissipation per pole	: 1 W
Mechanical durability - Number of operation (C-O)	: 10000
Mechanical durability - Number of cycles per hour (C-O)	: 360
Electrical lifespan:	
- Electrical lifespan (In in 480 V a.c.) - Number of operations:	: 6000
- Electrical lifespan (In in 480 V a.c.) - Number of cycles per hour:	: 360
Suitable for reverse connection	: Yes
Pitch between terminals	: 25 mm
Terminal pitch	: 0.98 in

Connections

Cable connections:	
- Maximum gauge	: 3 AWG
- Minimum gauge	: 10 AWG
Cables (Cu) - Tightening torque	: 57.5 lb.in
Connections with busbar:	

Dimensions

Height	: 160.0 mm / 6.3 in
Width	: 78.0 mm / 3.07 in
Depth	: 73.0 mm / 2.87 in
Weight	: 0.95 Kg / 2.09 Lb

Ambient conditions

Ambient air temperature for operation:	
- Minimum	: -13 °F / -25 °C
- Maximum	: 158 °F / 70 °C

Rated current reduction factor for temperature:

Temperature	Factor
10 °C	1.16
15 °C	1.12
20 °C	1.09
25 °C	1.07
30 °C	1.02
35 °C	1.02
40 °C	1.0
45 °C	0.97
50 °C	0.95
55 °C	0.91
60 °C	0.88

Rated current reduction factor for altitude:

Altitude	Rated current reduction factor	Reduction factor for maximum operating voltage
2000 m	1.0	1.0
3000 m	0.98	0.88
4000 m	0.93	0.78
5000 m	0.9	0.68

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Accessories

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Internal accessories:

- Auxiliary contact : Allow
- Alarm contact : Allow 1
- Auxiliary contact and alarm contact : Allow 1
- Trip coil or undervoltage coil : Allow 1

External accessories:

- Mechanical interlock : Allow
- Escutcheon : Allow
- Wiring terminal (LUG) : Built-in
- Panel door rotary handle : Allow
- Locking device : Allow

Standards

Product standard : UL 489

Certifications

- UL

Notes

- 1) In general, accessories are supplied separately from circuit breakers, except under the conditions specified in the catalog or in the CTM automatic transfer set.
- 2) Cable glands are supplied as standard on the DWB160 (IEC standard) and DWB (UL) models; on other versions, they are supplied separately as an accessory.
- 3) Phase separators or copper terminals are mandatory for use on the input terminals of circuit breakers and also in other conditions indicated in the catalog.
- 4) The IWA and IWB switches have the same dimensions as the respective DWA and DWB frames and share the same accessories.
- 5) Additional features are described in the product catalog and installation guide. For versions with electronic triggers, they are also included in the manual.
- 6) Image for illustrative purposes only.

