AUTO TRANSFER SWITCH

MCB ATS DATA SHEET Series M-CB

Description

The Mertech MCB Automatic Transfer Switches are the ideal solution for transferring power from the Mains to a Standby supply. With Mains and Standby supply monitoring plus full electrical and mechanical interlocking you can be confident of switching supply under fault conditions at any time. Each supply is protected by an electrically operated Miniature Circuit Breaker with sizes 40 Amps or 63 Amps. The MCB ATS is a 4 pole device but also suitable for DP requirements.

Designed for

- Domestic buildings
- Generator manufacturers
- Industrial buildings
- Distribution Boards
- Farms

Features

- Complete 2 or 4 pole isolation by MCBs
- Electrical and Mechanical interlocks
- 'Mains Available', Standby Available', 'Mains Closed' and 'Standby Closed' internal status indicators
- Optional features available
- Auto and Manual operation
- Generator Start/Stop Signal

Details

Supply Voltage 230/400V AC, 50Hz

No. Phases 1 Phase 2 Wire/3 Phase 4 Wire

Tripping Current Type C (5-10 ln)

Short Circuit Current 5kA

System Earth Solidly Earthed
Rating 40A & 63A - AC33

Ambient Temp Max +30deg C Min + 5deg C

Enclosure Protection IP55 to IEC60529
Area Classification Non Hazardous

Dimensions (mm) 300 H x 400 W x 150 D



Options

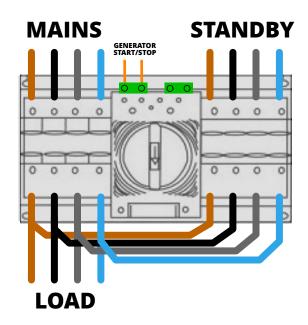
- Glazed door giving external supply status and ATS position indication
- Generator Delay On Start timer
- Remote ATS position volt free contacts
- Bridginging connections

Definition	Standard
Туре	ATS
Series	M-CB
Auto & Manual Operation	>
IP55 Protection	>
Maintenance Counters	
3 Phase Mains Sensing	
3 Phase Standby Sensing	
Single Phase Mains Sensing	✓
Single Phase Standby Sensing	✓
LCD Display	
Status Lamps (internal)	✓
Generator Start/Stop Signal	✓
Manual By-Pass	
GB/T 14048.11	✓
IEC 60947-6-1:2013 MOD	✓
Optical Comms Point	

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Customer Cabling



Customer cable connections are shown above. For Double Pole only cable the Brown and Blue cables.

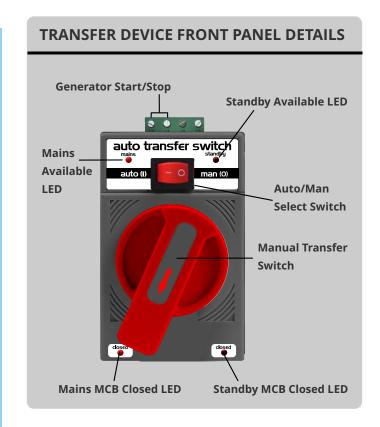
Customers power cables are connected directly to the motor operated Miniature Circuit Breakers. The Load connections connect to the bottom of the MCBs and require bridging cables between the Mains MCB and the Standby MCB. (Bridging connections are available as an optional extra).

Maximum cable size is 16mm^{2.}. Generator Start/Stop signal (Close to Start) cables connect as above.

ATS Operation:

The Mains and Standby supplies need to be connected to the top of the two 63A MCBs as shown above. The Load connections need to be paralleled together and then conected to the load as shown above.

When the Mains is alive the Mains Available LED illuminates. When the Standby is alive the Standby Available LED illuminates. When the Auto/Manual



selector switch is in the Auto position and the Mains is available the Mains MCB will close and the Mains Closed LED illuminates. If the Mains fails a generator start signal is given. Once the Standby supply is available the Mains MCB opens and the Standby MCB closes. The Mains Closed LED goes out and the Standby Closed LED illuminates.

On return of the Mains the Standby MCB opens, the Mains MCB closes and the generator start signal is removed.

If the AUTO/MAN selector switch is in the Manual position the transfer of supplies can be selected by turning the Manual Transfer Switch in the centre of the device.

