ACCESSORIES

TEMBREAK 2 MCCBs AND SWITCH DISCONNECTORS

Electrical Control Using Internally Mounted Accessories

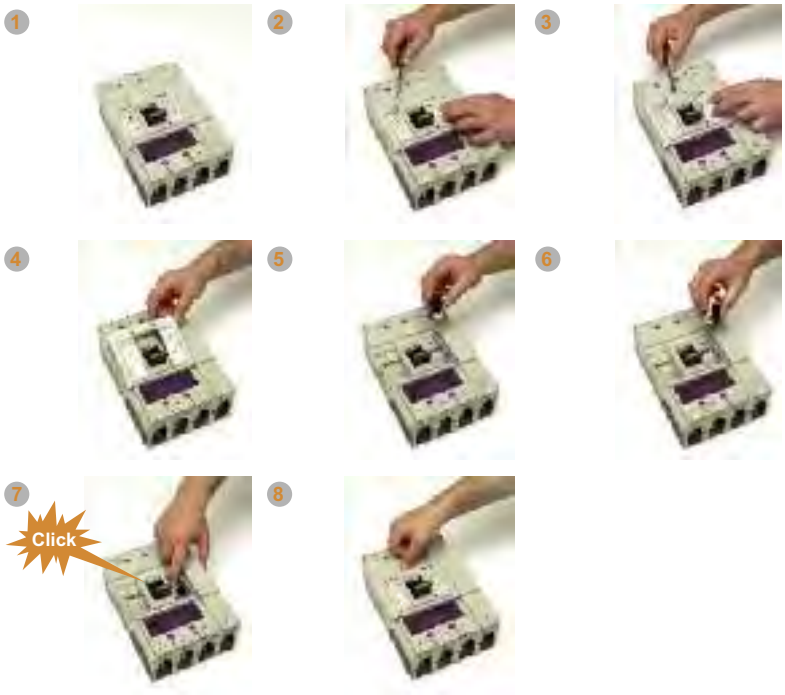
Electrical control accessories for TemBreak 2 are designed with the installer in mind. Status and alarm contacts, remote tripping coils and undervoltage protection coils are of modular design and convenient to use.

1) Heavy-duty auxiliary switch
2) Heavy-duty alarm switch
3) General-purpose auxiliary switch
4) General-purpose alarm switch
5) Shunt trip
6) Undervoltage trip

- All auxiliary, alarm switches and shunt trips are common up to 1600A. Undervoltage trips are split between two sizes: 125 to 630A and 800 to 1600A.
- All accessories are endurance tested to the same level as MCCBs.
- TemBreak 2 internal accessories are easily **field-installable.**
- All accessories are individually packaged and are supplied with fitting instructions.
- Control wiring is terminated on the accessory screw terminal. Alternatively a terminal block which clips to the side of the MCCB is available.

Installing Accessories in a 4 pole S400 model

The internal accessories can be easily installed in the field without special tools or product training.



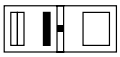
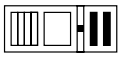
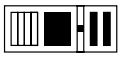
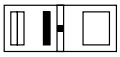
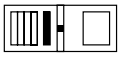
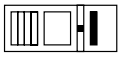
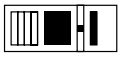
Easy field-Installation of Accessories

- Internal accessory can be simply plugged into position.
- No tools are required for this, except a screwdriver to lift the MCCB front cover clips.
- Accessories fit with a firm click when installed correctly.
- Colour coding of accessories helps identification and installation.

TEMBREAK 2 MCCBs AND SWITCH DISCONNECTORS

Electrical Control Using Internally Mounted Accessories

Valid Maximum Accessory Combinations

Frame Reference	TB2 S125 TB2 S250 TB2 S/H/L 250	TB2 H/L400 TB2 E/S 630	TB2 H/L 800 TB2 1000	TB2 1250 TB2 1600
	S125 H125 L125 VS125 ZE125 ** ZS125 ** S160 H160 L160 PVS160 S250 H250 L250 VS250 ZE250 ** ZS250 **	E400 E630 S400 S630 H400 L400 PVS400 VE400	S800 H800 L800 S1000 PVS800	S1250 S1600
General Purpose Auxiliary Switch General Purpose Alarm Switch Shunt Trip				
General Purpose Auxiliary Switch General Purpose Alarm Switch Undervoltage Trip				
Heavy Duty Auxiliary Switch Heavy Duty Alarm Switch Shunt Trip				
Heavy Duty Auxiliary Switch Heavy Duty Alarm Switch Undervoltage Trip				

Auxiliary Switch

Alarm Switch

Shunt Trip

Undervoltage Trip

- General purpose and heavy duty status indication switches cannot be mixed in the same MCCB.
- It is not possible to install a shunt trip and an undervoltage trip in an MCCB as they occupy the same location. Undervoltage trips can provide remote tripping if necessary by wiring a normally closed contact or pushbutton in series with the protected supply.
- Undervoltage trips with time delays require an external time delay controller which clips to the side of the MCCB.

** Shunt trip and undervoltage cannot be installed in this model.

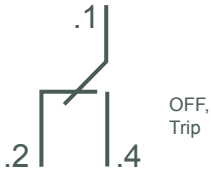
ACCESSORIES

TEMBREAK 2 MCCBs AND SWITCH DISCONNECTORS

Electrical Control Using Internally Mounted Accessories

Status Indication Switches

General Purpose Auxiliary Switch



Terminal Designations and Function of General Purpose Auxiliary Switch

General Purpose Auxiliary Switch (AX)

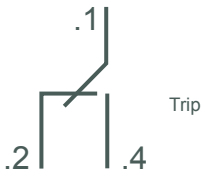
An auxiliary switch electrically indicates the ON or OFF status of the MCCB. The general purpose type is a changeover switch with 3 terminals.

A microcurrent version is available for switching currents as low as 1mA.

Auxiliary switches are colour coded grey. The cable capacity of the terminals is 0.5 to 1.25mm², bare cable.

The general purpose auxiliary switch meets the requirements of IEC 61058-1.

General Purpose Alarm Switch



Terminal Designations and Function of General Purpose Alarm Switch

General Purpose Alarm Switch (AL)

An alarm switch electrically indicates the TRIP status of the MCCB. The general purpose type is a changeover switch with 3 terminals.

A microcurrent version is available for switching currents as low as 1mA.

Alarm switches are colour coded grey and black. The cable capacity of the terminals is 0.5 to 1.25mm², bare cable

The general purpose alarm switch meets the requirements of IEC 61058-1.

General purpose auxiliaries and alarm switch ratings

Volts (V)	AC Amperes (A) Resistive Load	AC Amperes (A) Inductive Load	Volts (V)	DC Amperes (A) Resistive Load	DC Amperes (A) Inductive Load	Minimum Load
440	-	-	250	-	-	100mA at 15V DC.
240	3	2	125	0.4	0.05	
110	3	2	30	3	2	

Microcurrent versions

DC Volts (V)	DC Amperes (A) Resistive Load	Minimum Load
30	0.1	1mA at 5V DC and 30V DC.

ACCESSORIES

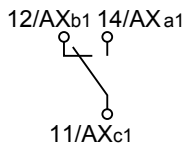
TEMBREAK MCCBs AND SWITCH DISCONNECTORS

Electrical Control Using Internally Mounted Accessories

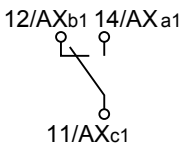
Operation of AX and AL

An auxiliary switch electrically indicates the ON or OFF status of the MCCB.

An alarm switch electrically indicates the TRIP status of the MCCB.



AX Terminal Designations



AL Terminal Designations

Operation of AX and AL

Switch	Breaker status	[ON]	[OFF]	[TRIP]
Auxiliary switch (AX) status		11/AXc-14/AXa “Closed” 11/AXc-12/AXb “Open”	11/AXc-14/AXa “Open” 11/AXc-12/AXb “Closed”	11/AXc-14/AXa “Open” 11/AXc-12/AXb “Closed”
Alarm switch (AL) status		91/ALc-94/ALa “Open” 91/ALc-92/ALb “Closed”	91/ALc-94/ALa “Open” 91/ALc-92/ALb “Closed”	91/ALc-94/ALa “Closed” 91/ALc-92/ALb “Open”

Ratings of Auxiliary and Alarm (AX/AL)

Auxiliary and Alarm Switch Ratings

MCCB Model	General Current							For microload		
	AC (V)			DC (V)			Minimum load	DC (V)		Minimum load
	Voltage (V)	Ampres (A)		Voltage (V)	Ampres (A)			(V)	(A)	
		Resistive load	Inductive load		Resistive load	Inductive load		Minimum load	Resistive load	
XS1250ND, XS1600ND	480	3	2	250	0.3	0.3	DC5V 160mA DC30V 26.7mA	30	0.1	DC5V 1mA DC30V 1mA
XS2000ND, XS2500ND	250	5	5	125	0.6	0.6				
	125	5	5	5	5	4				