

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.

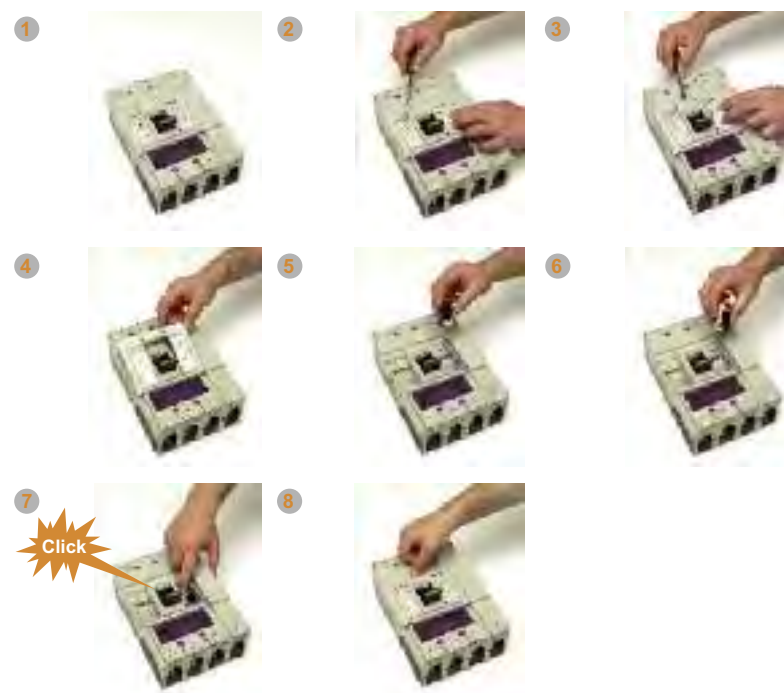


- 1) Heavy-duty auxiliary switch
- 2) Heavy-duty alarm switch
- 3) General-purpose auxiliary switch
- 4) General-purpose alarm switch
- 5) Shunt trip
- 6) Undervoltage trip

Installing Accessories in a 4 pole S400 model

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

- 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.



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.

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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.

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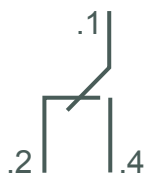
TEMBREAK 2 MCCBs AND SWITCH DISCONNECTORS

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.

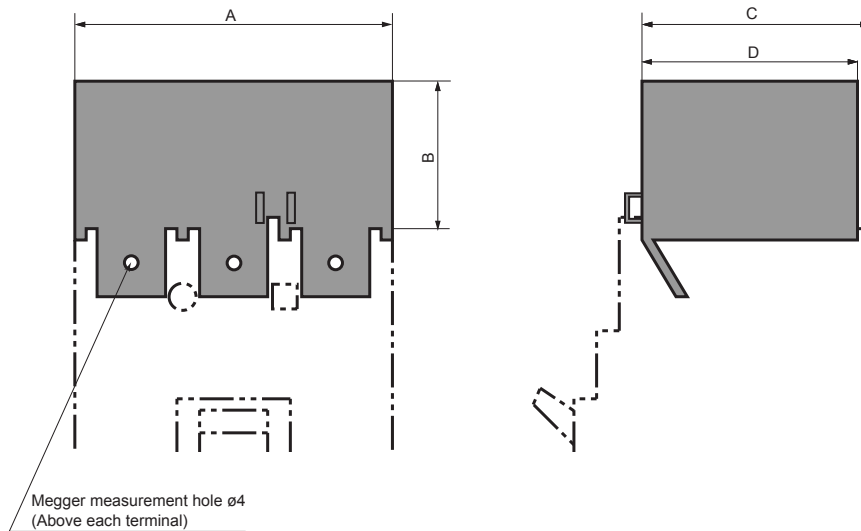
General purpose auxiliaries and alarm switch ratings						
Volts (V)	AC		Volts (V)	DC		Minimum Load
	Amperes (A)			Amperes (A)		
	Resistive Load	Inductive Load		Resistive Load	Inductive Load	
440	-	-	250	-	-	100mA at 15V DC.
240	3	2	125	0.4	0.05	
110	3	2	30	3	2	

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

TERMINAL COVERS

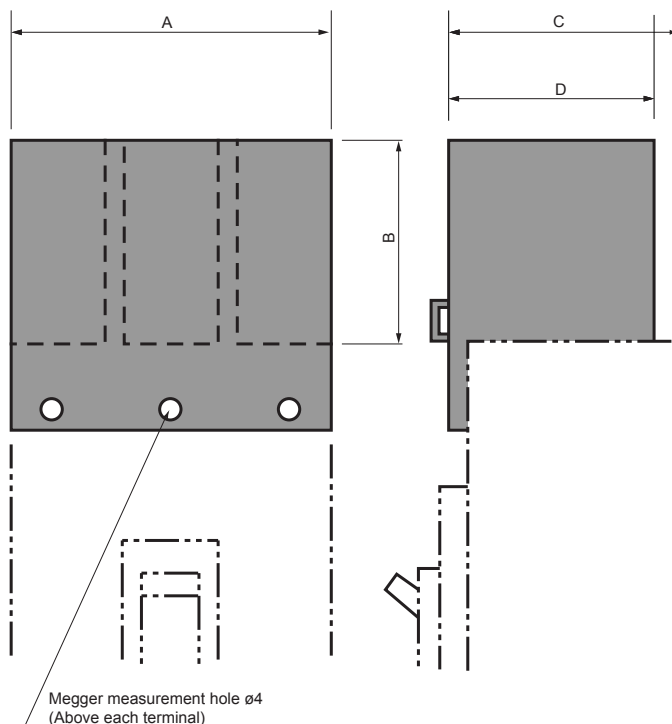
Tembreak 2 MCCBs & Switch Disconnectors

Terminal Covers for Front Connected MCCBs (CF)



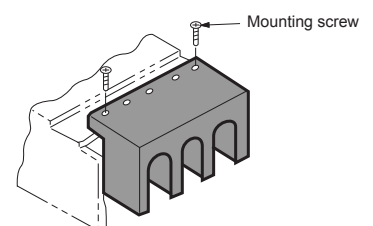
Plug-in mounted version

This version can be mounted simply by being plugged in the breaker body.



Screw-mounted version

The terminal covers for 630 to 1000AF are mounted to the breakers using tapping screws. The terminal cover for 1250AF is mounted using insert nuts on the breaker cover using screws. The insert nuts do not come standard with the breaker. Please be sure to state “with terminal cover (CF)” when ordering the breaker.

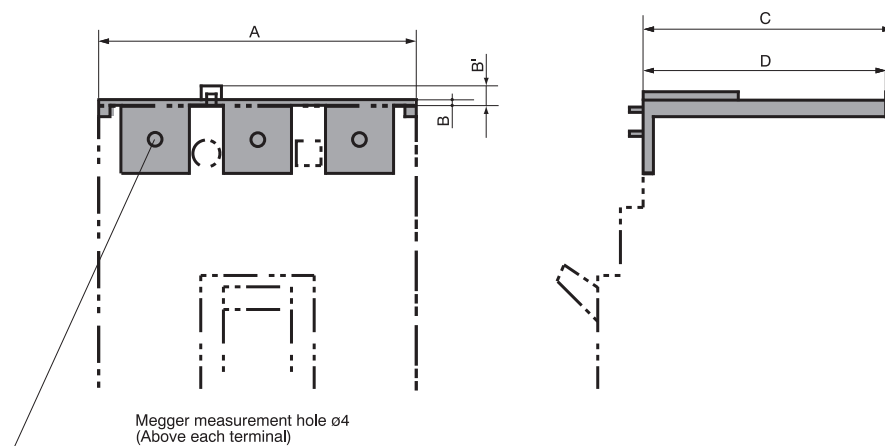


DIMENSIONS

TERMINAL COVERS

Tembreak 2 MCCBs & Switch Disconnectors

Terminal Covers for Cable Clamp Terminals Type MCCBs (CS)



MCCB type	Connection	A			B			B'	C			D			Mounting version	
		1P	3P	4P	1P	3P	4P	3P, 4P	1P	3P	4P	1P	3P	4P	Plug-in mounted	Screw-mounted
S125, VS125	Front conn.	30	90	120	40	40	40	o	48	48	48	46	46	46	ø	—
	Cable clamp	30	90	120	2.5	2.5	2.5	6	62.5	61	61	60	59.5	59.5	ø	—
S160.-NJ, S160NN S250.-NJ, S250.-GJ, S250.-NN, VS250, PVS160	Front conn. (1)	35	105	140	55	55	55	o	54	54	54	52	52	52	ø	—
	Cable clamp	35	105	140	2.5	2.5	2.5	6	63	61	61	49.5	59.5	59.5	ø	—
H125, L125, H160, L160, S250.-NE, S250.-GE, S250.-PE H250, L250	Front conn. (1)	o	105	140	o	55	55	o	o	89	89	o	87	87	ø	—
	Cable clamp	o	105	140	o	2.5	2.5	4.5	o	96	96	o	59.5	59.5	ø	—
E400, S400 E630, S630 PVS400	Front conn. Wide type	o	180	240	o	110	114	o	o	97	98	o	96	98	ø	—
	Front conn. Straight type	o	140	185	o	85	85	o	o	97	97	o	94.5	94.5	ø	—
	Cable clamp	o	140	185	o	3	3	4.5	o	97	97	o	93	93	ø	—
H400, L400	Front conn. Wide type	o	180	240	o	110	114	o	o	134	135	o	96	98	ø	—
	Front conn. Straight type	o	140	185	o	85	85	o	o	134	134	o	94.5	94.5	ø	—
	Cable clamp	—	140	185	o	3	3	4.5	o	134	134	o	93	93	ø	—
S800, S1000, PVS800	Front conn. (3)	—	215	285	—	130	130	—	—	99.5 (102)	99.5 (102)	—	99 (101.5)	99 (101.5)	—	ø
H800, L800	Front conn. (2) (3)	—	215	285	—	130	130	—	—	99.5 (139)	99.5 (139)	—	99 (101.5)	99 (101.5)	—	ø
S1250	Front conn. (3)	—	215	285	—	130	130	—	—	115	115	—	99 (102.5)	99 (102.5)	—	ø

Notes:

(1) Not suitable when extension bars (FB) are fitted.

(2) There will be an approx. 40 mm gap between the bottom of the terminal cover and the breaker mounting surface.

(3) Values in brackets indicate the distance to the head of terminal cover mounting screws.