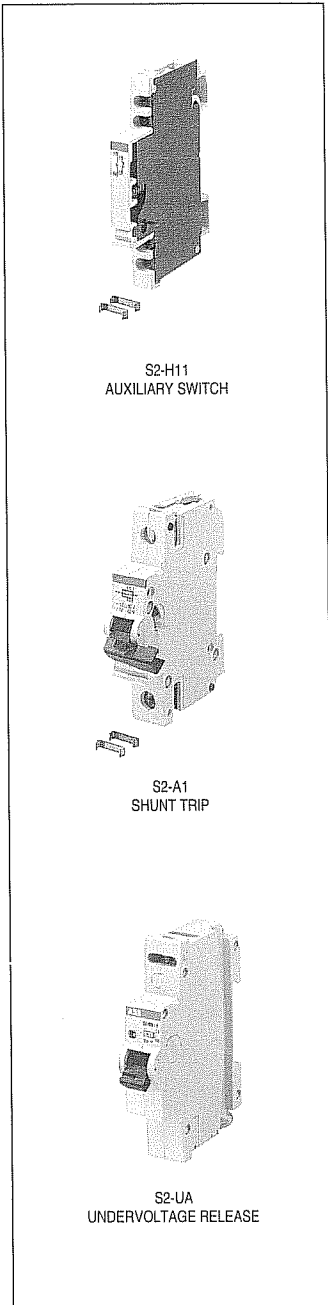


Accessories

S250, S270, & S280



Auxiliary Switch

The S2-H11 auxiliary switch can be field mounted to any S250, S270 or S280 series breaker. The H11 includes 1NO/1NC contacts, the H20 includes 2NO and the H02 includes 2NC contacts.

The auxiliary contacts will signal whether the breaker is in the ON or OFF position. The contacts are rated 6A/240VAC and 1.5A/110VDC. Minimum operating voltage is 12VAC/VDC.

Bell Alarm

The S2-S bell alarm includes a set of contacts that will only signal when the breaker has tripped. Typically the contacts would be connected to an alarm or bell to signal the operator that an overcurrent trip has occurred.

The bell alarm also includes a test button for testing the alarm contacts without opening the breaker. The contact is rated 6A/240VAC and 1.5A/110VDC. Minimum operating voltage is 12VAC/VDC.

Bell Alarm with Auxiliary Contact

The S2-S/H bell alarm with auxiliary contact device combines one set of bell alarm contacts with one set of auxiliary contacts (NO).

Shunt Trip

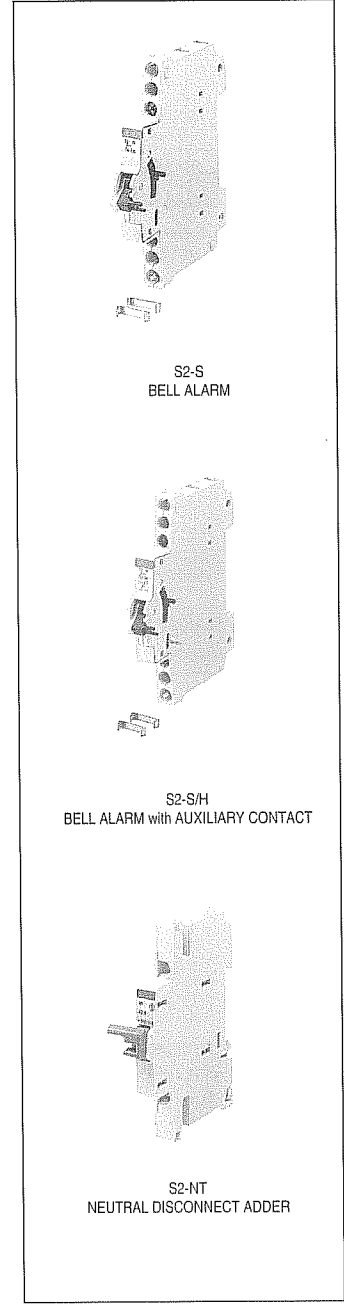
For remote tripping of breaker, a shunt trip device can be added to the MCB. The solenoid device opens the breaker after control voltage is applied. Shunt trips are available depending on control system voltage (12-415VAC/VDC).

Undervoltage Release

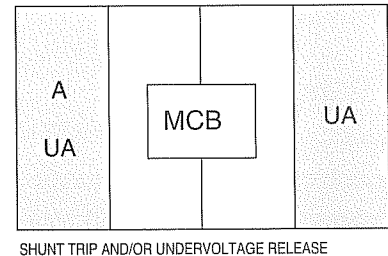
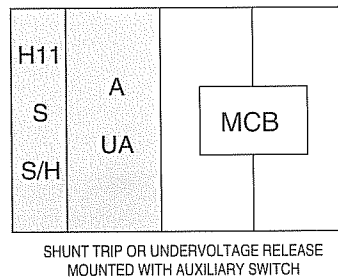
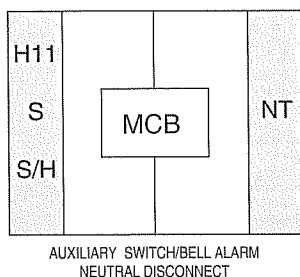
When control voltage drops below approximately 50% of rated voltage, the S2-UA opens the breaker. The breaker can not be operated unless proper control voltage is first applied to the UVR coil. Similar in size and mounting to the shunt trip accessory; can be left or right side mounted.

Neutral Disconnect

When switching of neutral with breaker contacts is desired, the neutral module S2-NT can be added to any S250, S270 or S280 MCB. The neutral connection makes before the MCB contacts connect line to load.



Possible mounting arrangements of MCB accessories



Accessories

S250, S270, & S280

ELECTRICAL ACCESSORIES	CATALOG NUMBER	LIST PRICE	DELIVERY CLASS	SUGGESTED ORDER QUANTITIES	WEIGHT (OZ.) 1 PIECE
Auxiliary Contacts 1NO + 1NC For field mounting; left side 1NO/1NC 2NO 2NC	S2-H11	\$ 18	S	1	1.4
	S2-H20	18	S	1	1.4
	S2-H02	18	S	1	1.4
Bell Alarm For field mounting, left side.	S2-S	24	S	1	1.4
Bell Alarm with Auxiliary Contact For field mounting, left side.	S2-S/H	29	S	1	1.4
Shunt Trip For field mounting, left side. 12-60VAC (12-110VDC) 110-415VAC (220VDC)	S2-A1	69	S	1	5.2
	S2-A2	69	S	1	5.2
Undervoltage Release® For field mounting, left or right side. 12V 24V 48V 110V 220V 380V	S2-UA12	108	S	1	5.2
	S2-UA24	108	S	1	5.2
	S2-UA48	108	S	1	5.2
	S2-UA110	108	S	1	5.2
	S2-UA220	108	S	1	5.2
	S2-UA380	108	S	1	5.2
Hand Operated Neutral For field mounting, right side. Makes contact before MCB contacts close.	S2-NT	13.50	S	1	1.4

FACTORY MOUNTING

All accessories can be easily mounted in the field. For factory mounting of any accessory devices, add \$27 list to total price per breaker. To create complete catalog number, take suffix of accessory device following "S2-" and add suffix to end of breaker part number. Multiple suffixes must be added in alphabetical order.

Example: S272-K20A1 \$ 144 (2 pole, 20A breaker with type A1 shunt trip) S272-K20 @ \$48 + A1 @ \$69 + factory mounting @ \$27 = \$144
 S272-K20A2H11 \$ 162 (2 pole, 20A breaker with type A2 shunt trip and H11 aux. contacts) S272K20 @ \$48 + A2 @ \$69 + H11 @ \$18 + factory mounting @ \$27 = \$162

Auxiliary contacts and shunt trips may be mounted in combination.

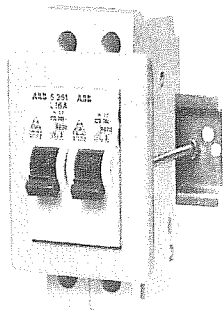
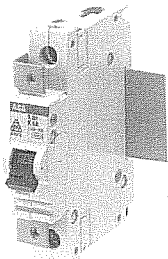
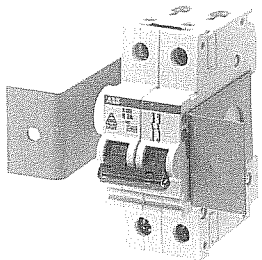

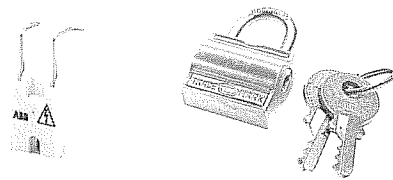
NOTE: Above accessories are for use with types S250, S270 and S280 breakers only.

DELIVERY CLASS
S - Standard item, stock to 4 weeks
A - 6 - 8 week lead time
B - 10 - 12 week lead time
Consult factory for actual availability status

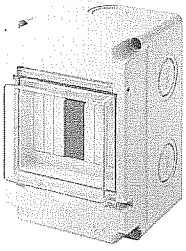
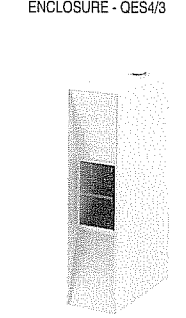
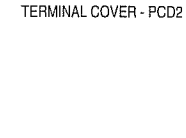
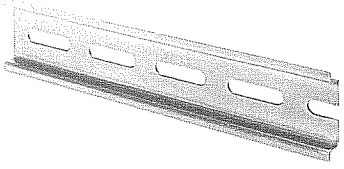
® UL & CSA pending

Accessories

S250, S270, & S280
S220, E270, & F360

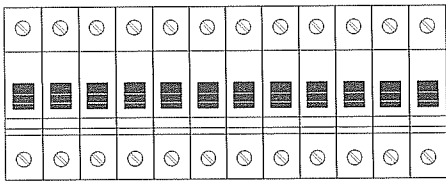
	ELECTRICAL ACCESSORIES	CATALOG NUMBER	LIST PRICE	DELIVERY CLASS	SUGGESTED ORDER QUANTITIES	WEIGHT (OZ.) 1 PIECE
 <p>FRONT MOUNTING KIT - S500-ME2</p>	<p>Front Mounting Kit Includes flange, mounting rail, terminals for rear connection and hardware.</p> <p>For 2 Modules 2-5 Modules 2-10 Modules Optional Rear Terminals (2 per kit)</p>	<p>S500-ME1 S500-ME2 S500-ME3 MB-2RT</p>	<p>\$ 8 16 32 5</p>	<p>S S S S</p>	<p>1 1 1 1</p>	<p>2.1 2.9 3.6 1.5</p>
 <p>FRONT MOUNTING CLIP - MB-CL</p>	<p>Front Mounting Clip Simple mounting clip for up to four module mounting</p> <p>For 1-4 Modules</p>	<p>MB-CL</p>	<p>4</p>	<p>S</p>	<p>1</p>	<p>2</p>
 <p>FRONT MOUNTING BRACKET - MB-3PD</p>	<p>Front Mounting Bracket For flush mounting of three pole MCBs; includes hardware.</p> <p>For 1-3 Modules</p>	<p>MB-3PD</p>	<p>6</p>	<p>S</p>	<p>1</p>	<p>2.5</p>
 <p>PIN-TYPE CONNECTOR - SZ-AST35</p>	<p>Pin-Type Connector Needed for connecting large cable 2AWG (35mm) and busbar on same breaker.</p> <p>2AWG (35sq mm)</p>	<p>SZ-AST35</p>	<p>4.50</p>	<p>S</p>	<p>10</p>	<p>0.5</p>
 <p>LOCKING DEVICE - SA1; PADLOCK FOR LOCKING DEVICE - SA2</p>	<p>Locking Device Allows breaker to be locked in ON or OFF position.</p> <p>Adaptor Only Padlock Only w (2) Keys</p>	<p>SA1 SA2</p>	<p>4.50 9.50</p>	<p>S S</p>	<p>10 10</p>	<p>0.7 0.1</p>

S250, S270, & S280
S220, E270, & F360

	ELECTRICAL ACCESSORIES	CATALOG NUMBER	LIST PRICE	DELIVERY CLASS	SUGGESTED ORDER QUANTITIES	WEIGHT (OZ) 1 PIECE
 <p>ENCLOSURE - QES4/3</p>	<p>Labeling Accessory Snaps into rail indent on front of MCB.</p> <p>Label Holder & labels Includes: 100 label carriers 1 sheet = 100 blank labels 1 sheet = 100 numbered labels</p>	STL	\$ 37	S	1	—
 <p>ENCLOSURE - QES4/3</p>	<p>Enclosure Molded plastic complete with mounting rail and knock-outs for cable entries</p> <p>For four modules For ten modules</p>	QES4/3 QES10/3	42 63	S S	1 1	10.8 20.4
 <p>TERMINAL COVER - PCD2</p>	<p>Terminal Covers For additional protection against accidental contact, includes integrated mounting rail</p> <p>For two modules For four modules For six modules For eight modules</p>	PCD2 PCD4 PCD6 PCD8	16 22.50 28. 33	S S S S	1 1 1 1	2.0 2.8 3.4 4.1
 <p>MOUNTING RAIL - EHMR-40</p>	<p>Mounting Rail Universal mounting 35mm DIN rails are available in 39 inch strips (1 meter) and can be cut to length required and attached to panels. MCBs have built in clips which allow for snap-on mounting.</p>	EHMR-40	21	S	1	3

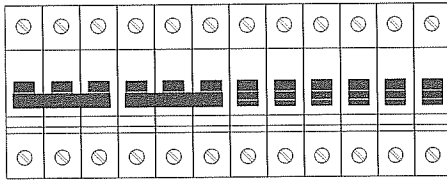
Busbars & Connectors

LOWER MOUNT ON S250/S270, LOWER OR UPPER MOUNT ON S280/S220.



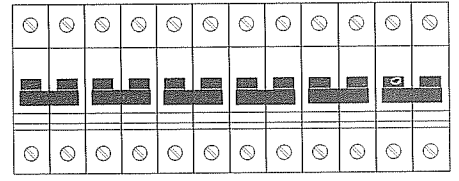
L1...

1 Pole
1 Phase, 1 Wire
SZ-KS 1/56
SZ-KS 2/56
SZ-VB 45.32



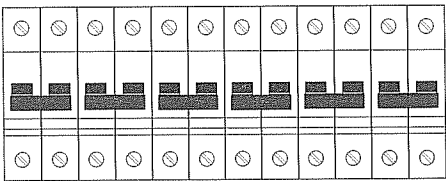
L1 L2 L3...

1 or 3 Pole
3 Phase, 3 Wire
SZ-PSB 4N
SZ-PSB 12N

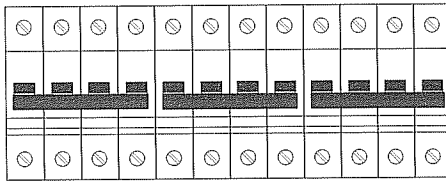


L1 N...

2 Pole
2 Phase, 2 Wire
SZ-PSB 54N
SZ-PSB 56N

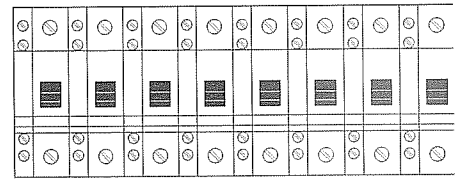


L1 N L2 N L3 N... 2 Pole
2 Phase, 4 Wire
SZ-PSB 58N
SZ-PSB 60N



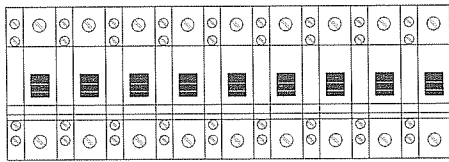
L1 L2 L3 N...

4 Pole
3 Phase, 4 Wire
SZ-PSB 62N
SZ-PSB 64N



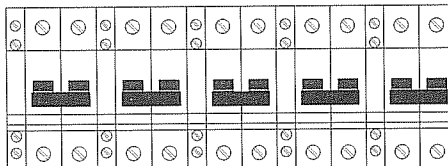
L1...

1 Pole + Aux Contacts
1 Phase, 1 Wire
SZ-3/39N
SZ-4/39N



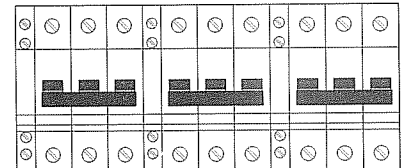
L1 L2 L3...

1 Pole + Aux Contacts
3 Phase, 3 Wire
SZ-PSB 46N
SZ-PSB 48N



L1 L2...

2 Pole + Aux Contacts
2 Phase, 2 Wire
SZ-PSB 92N

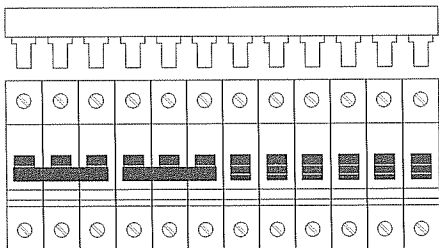


L1 L2 L3...

3 Pole + Aux Contacts
3 Phase, 3 Wire
SZ-PSB 50N
SZ-PSB 52N

UPPER MOUNT FOR SINGLE FUNCTION TERMINALS (250/S270 ONLY)

L1 L2 L3...



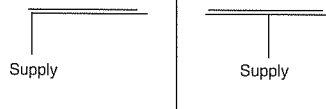
1 or 3 Pole
3 Phase, 3 Wire
SZ-PSB 22
SZ-PSB 24

① Example: 56 x 1 is fifty-six single pole breakers. 20 x 3 is twenty 3 pole breakers

ITEM	CATALOG NUMBER	CROSS SECTION SQ MM	LENGTH MM	NO. OF POLES ①	ENDCAP TYPE	LIST PRICE	DELIVERY CLASS	SUGGESTED ORDER QUANTITIES	WEIGHT (OZ.) 1 PIECE
	SZ-KS1/56	12	988	56 X 1	—	\$ 18	S	50	2.6
	SZ-KS2/56	24	988	56 X 1	—	23	S	50	5.2
	SZ-VB45.32	36	988	56 X 1	—	34	S	50	10.0
	SZ-PSB4N	10	1065	20 X 3	1	65	S	10	21.4
	SZ-PSB12N	16	1065	20 X 3	2	88	S	10	34.2
Busbars for mounting in dual function terminals	SZ-PSB54N	10	1035	29 X 2	3	61	S	10	14.4
	SZ-PSB56N	16	1035	29 X 2	3	61	S	10	19.1
	SZ-PSB58N	10	1048	29 X 2	3	99	A	10	22.3
	SZ-PSB60N	16	1048	29 X 2	3	119	A	10	30.8
Upper or lower: S280 S220 E270	SZ-PSB62N	10	1056	15 X 4	3	103	S	10	23.2
	SZ-PSB64N	16	1056	15 X 4	3	119	S	10	31.6
Lower only: S250 S270	SZ-KS3/39N	10	1044	39 X 1	3	25	B	10	7.4
	SZ-KS4/39N	16	1044	39 X 1	3	28	B	10	10.1
	SZ-PSB46N	10	1044	13 X 3	3	62	B	10	16.1
	SZ-PSB48N	16	1044	13 X 3	3	79	B	10	22.1
	SZ-PSB92N	16	1065	24 X 2	—	87	B	10	23.2
	SZ-PSB50N	10	980	16 X 3	3	62	B	10	15.8
	SZ-PSB52N	10	980	16 X 3	3	79	B	10	22.6
Upper busbars: S250/S270	SZ-PSB22	10	1065	20 x 3	—	65	S	10	21.4
	SZ-PSB24	16	1065	20 x 3	—	88	S	10	34.2
Endcaps Type 1	PSB-END1	—	—	—	—	1	S	50	—
Type 2	PSB-END2	—	—	—	—	1	S	50	—
Type 3	PSB-END3	—	—	—	—	1	S	50	—

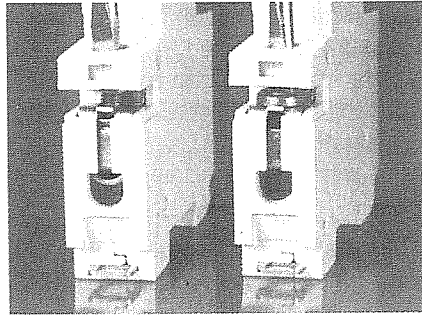
Max. Busbar Current per VDE 0606:

Size	End Connect	Center Connect
10 sq mm:	50A	100A
12 sq mm:	55A	110A
16 sq mm:	65A	130A
20 sq mm:	70A	140A
24 sq mm:	85A	170A
36 sq mm:	110A	220A

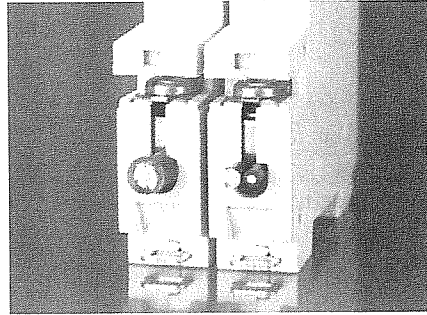


Busbars & Connectors

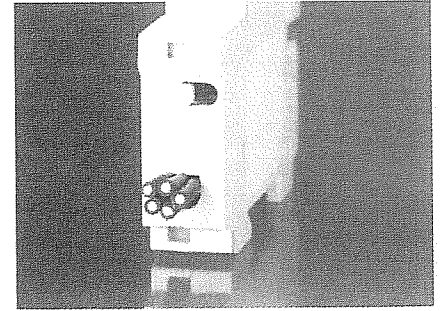
Connection Methods



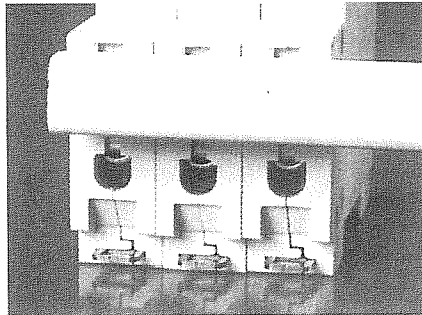
Dual function terminals provided in open position for connection to busbars. Pressing on screw head opens box terminal for cable insertion. Only the lower terminal is dual function.



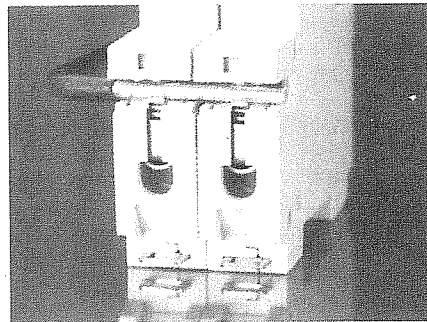
Terminals allow for connection of cable 18-4 AWG. Conductors of different sizes may also be used in same terminal.



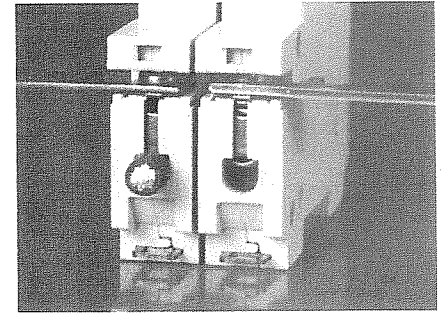
Up to five conductors, 16 AWG each, can be safely connected per terminal.



Lower terminals can be bussed together with single phase or multi-phase busbars as shown. Upper terminals can also be busbar connected.



Lower terminal can also be bussed with solid round conductor.



Cables can be connected to box terminals in addition to busbar connections on lower, dual function terminals.