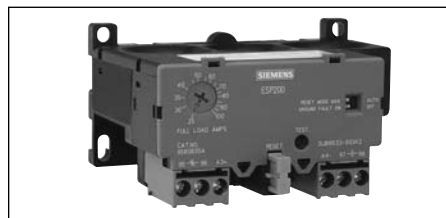


# Overload Relays

## Solid State ESP200, Class 48, 958 and 958L

*General*



Features	Benefits
<ul style="list-style-type: none"> <li>▪ Trip Classes - 5, 10, 20, or 30 Selectable by DIP-switches</li> </ul>	<ul style="list-style-type: none"> <li>▪ Field changeable reduces time and inventory. Suitable for light, normal and heavy starting conditions</li> </ul>
<ul style="list-style-type: none"> <li>▪ Phase Loss Protection - Trips in less than 3 Seconds</li> </ul>	<ul style="list-style-type: none"> <li>▪ Protects motor burn out and minimizes motor heating up</li> </ul>
<ul style="list-style-type: none"> <li>▪ Phase Unbalance - Trips based on Trip Class selected</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minimizes temperature rise of the motor on a asymmetrical three-phase-system</li> </ul>
<ul style="list-style-type: none"> <li>▪ Ground Fault - Trips 60% of Motor Current</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides optimum system protection of motors against high-resistance short-circuits or ground faults due to moisture, condensation, damage of insulation or any other reason</li> </ul>
<ul style="list-style-type: none"> <li>▪ Trip Indicator - Visible</li> </ul>	<ul style="list-style-type: none"> <li>▪ Save time, faster to identify overload Trip</li> </ul>
<ul style="list-style-type: none"> <li>▪ Ambient Insensitive</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prevents nuisance tripping</li> </ul>
<ul style="list-style-type: none"> <li>▪ No Heaters Required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Saves cost and eliminates time for installation of heaters</li> </ul>
<ul style="list-style-type: none"> <li>▪ Self-Powered - No outside source required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduce cost for external power supply</li> </ul>
<ul style="list-style-type: none"> <li>▪ FLA dial with wide Adjustment - 4:1 ratio</li> </ul>	<ul style="list-style-type: none"> <li>▪ Provides wide range, reduces inventory</li> </ul>
<ul style="list-style-type: none"> <li>▪ Self Protected in short circuit condition (when used with proper fuses or motor starter protector)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unlike bimetal overloads, this eliminates replacement of the overload heaters after short circuit</li> </ul>
<ul style="list-style-type: none"> <li>▪ Test Button - Tests Electronics</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tests the complete electronic functions including the trip mechanism. Increases up time</li> </ul>
<ul style="list-style-type: none"> <li>▪ Thermal Memory</li> </ul>	<ul style="list-style-type: none"> <li>▪ Prevents re-starting motor when it is still hot</li> </ul>
<ul style="list-style-type: none"> <li>▪ Conformally coated circuit board</li> </ul>	<ul style="list-style-type: none"> <li>▪ Resists against environmental conditions</li> </ul>
<ul style="list-style-type: none"> <li>▪ 1 NO and 1NC Contacts Standard. B600, R300</li> </ul>	<ul style="list-style-type: none"> <li>▪ Makes it easier for user to wire local contacts</li> </ul>
<ul style="list-style-type: none"> <li>▪ Operating Temperature: -25 °C - 65 °C</li> </ul>	<ul style="list-style-type: none"> <li>▪ Wide operating temperature range prevents nuisance tripping with temperature changes</li> </ul>
<ul style="list-style-type: none"> <li>▪ Repeat Accuracy &lt;1 %.</li> </ul>	<ul style="list-style-type: none"> <li>▪ For more precise settings and reduced nuisance tripping</li> </ul>
<ul style="list-style-type: none"> <li>▪ Removable Terminal Block</li> </ul>	<ul style="list-style-type: none"> <li>▪ Terminal Block can be removed without removing wires. Saves time for replacements</li> </ul>
<ul style="list-style-type: none"> <li>▪ Automatic reset</li> </ul>	<ul style="list-style-type: none"> <li>▪ Auto. Reset is 3 minutes after tripping, allowing motor to cool down before re-start. If Manual Reset is selected, overload can be reset immediately</li> </ul>
<ul style="list-style-type: none"> <li>▪ Remote reset</li> </ul>	<ul style="list-style-type: none"> <li>▪ As an alternative to the mechanical RESET options, an electrical remote RESET can be used by applying 24 V DC to terminals A3 and A4</li> </ul>
<ul style="list-style-type: none"> <li>▪ DIN Rail Mounted</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reduces installation time</li> </ul>
<ul style="list-style-type: none"> <li>▪ Touch - Safe Terminals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Protects against accidental touching of live circuits</li> </ul>
<ul style="list-style-type: none"> <li>▪ UL listed CSA certified</li> </ul>	<ul style="list-style-type: none"> <li>▪ Third party approval standard</li> </ul>

# Overload Relays

## Solid State Class 48, ESP200 and 3RB20

*Selection*



3-Phase, 48ATC3S00

### Ordering Information

- For CT's see Accessories page 17-51.
- Dimensions see page 17-122.
- To retrofit or direct mount to a contactor, order 49ASMP1, 2, or 3 separately. See Retrofit Plates below.
- For remote mounting of frame size A order 49ASMS1 terminals separately, see page 17-97.

### Solid State—Class 48

Current Adjustment Range	Phase	Frame Size	Catalog Number	MRPD/MLFB	List Price \$
0.25–1	3	"A"	48ATA3S00	3UB81134AB2	
0.75–3.4	3	"A"	48ATB3S00	3UB81134BB2	
3–12	3	"A1"	48ATC3S00	3UB81234CW2	
5.5–22	3	"A1"	48ATD3S00	3UB81234DW2	
10–40	3	"A1"	48ATE3S00	3UB81234EW2	
13–52	3	"B"	48BTF3S00	3UB81334FW2	
25–100	3	"B"	48BTG3S00	3UB81334GW2	
50–200	3	"B"	48BTH3S00	3UB81334HW2	
100–300	3	"A1" ②	48ATJ3S00	3UB81234JW2	
133–400	3	"A1" ⑧	48ATK3S00	3UB81234KW2	
200–600	3	"A1" ④	48ATL3S00	3UB81234LW2	
250–750	3	"A1" ⑦	48ATM3S00	3UB81234MW2	
400–1220	3	"A1" ⑤	48ATN3S00	3UB81234NW2	
0.25–1	1	"A"	48ATA1S00	3UB88134AB2	
0.75–3.4	1	"A"	48ATB1S00	3UB88134BB2	
3–12	1	"A1"	48ATC1S00	3UB88234CW2	
5.5–22	1	"A1"	48ATD1S00	3UB88234DW2	

### Solid State—3RB206<sup>③⑥</sup>, 3-Phase, Manual/Auto Reset

For Contactor Size	Setting Range Amps	Class 10 Catalog Number	List Price \$	Class 20 Catalog Number	List Price \$
5	55 - 250	3RB2066-1GC2		3RB2066-2GC2	
6	160 - 630	3RB2066-1MC2		3RB2066-2MC2	

### Retrofit Plates for Contactors, Class 48

Replacement for Starter Sizes	ESP200 Overload Frame Size <sup>①</sup>	Retrofit Plate Suffix	Plate Kit Separate	Price Adder \$
Size 00–1¼ Size 2, 2½	A or A1 B	1P 2P	49ASMP1 49ASMP2	
Size 3, 3½ Size 4	B B	3P 4P	49ASMP3 49ASMP3	

### Ambient Compensated Bimetal—Open Type Class 48 Single Phase, 3-Phase (Panel Mount Only)

Poles	Amp Rating	Auxiliary Contacts	Contact Rating	Catalog Number	List Price \$
1	25 60 100 180	1 NC 1 NC 1 NC 1 NC	5A (B600) & 5A (P300)	48DA18AA4 48GA18AA4 48HA18AA4 48JA18AA4	
3	30 30 60 60	1 NC 1 NO/NC 1 NC 1 NO/NC	10A (A600) & 5A (P300)	48DC38AA4 48DC39AA4 48GC38AA4 48GC39AA4	
	100 180	3 NC 3 NC	5A (B600) & 5A (P300)	48HA38AA4 48JA38AA4	

① To determine frame size of replacement solid state overload, refer to retrofit plates table above.

② Requires use of 300:5 Current Transformers—3 of 97CT005.

③ Product Category: IEC.

④ Requires use of 600:5 Current Transformers—3 of 97CT008.

⑤ Requires use of 1200:5 Current Transformers—3 of 97CT012.

⑥ Overload has busbar connections.

⑦ Requires use of 750:5 Current Transformers—3 of 97CT009.

⑧ Requires use of 400:5 Current Transformers—3 of 97CT006.