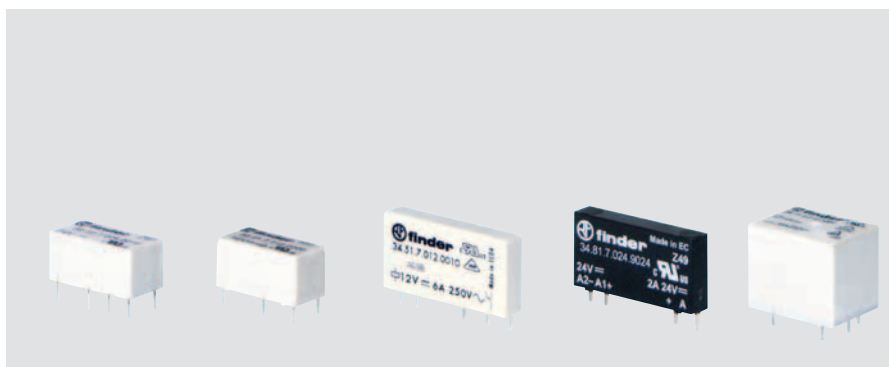


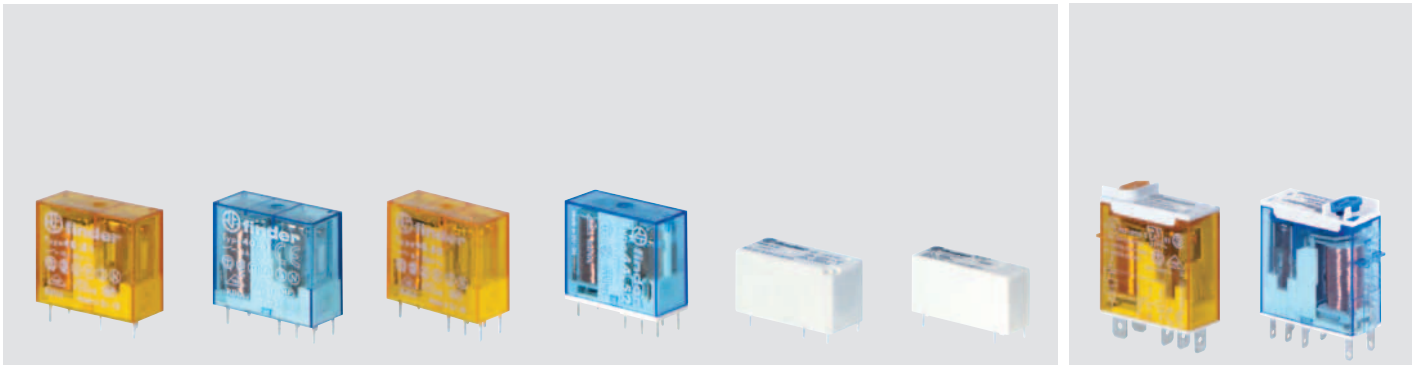
## PCB mount relays



type		30 series	32 series	34 series		36 series
<b>description</b>		sub-miniature dual-in-line PCB mount	miniature low profile sensitive	ultra-slim PCB, low absorption	ultra-slim PCB, solid state	sugar-cube PCB low consumption
<b>contact specification</b>		<b>30.22</b>	<b>32.21</b>	<b>34.51</b>	<b>34.81</b>	<b>36.11</b>
contact configuration		2 CO (DPDT)	1 CO (SPDT)	1 CO (SPDT)	1 NO (SPST)	1 CO (SPDT)
rated current	A	2	6	6	2	10
maximum peak current	A	3	15	10	20	15
rated voltage	V	125	250	250	24	250
maximum peak voltage	V	250	400	400	33	250
rated load AC1	VA	125	1500	1500	1mA	2500
rated load AC15 (230V AC)	VA	25	250	300	-	500
single phase motor (230V AC)	kW	-	0.185	0.185	-	0.37
breaking capacity DC1 30/110/220V	A	2/0.3/-	3/0.35/0.2	6/0.2/0.12	2/-/-	10/0.3/0.12
minimum switching load	mW (V / mA)	10(0.1/1)	500(10/5)	500(12/10)	-	500(5/100)
standard contact material		AgNi + Au	AgCdO	AgNi	-	AgCdO
<b>coil specification</b>						
nominal voltage (U <sub>N</sub> )	V AC	-	-	-	-	-
	V DC	5-6-9-12-24-48	12-24-48	5-12-24-48	24	5-6-9-12-24-48
rated power AC/DC	VA (50Hz) / W	-   0.2	-   0.2	-   0.17	-	-   0.36
operating range (U <sub>N</sub> )	AC	-	-	-	-	-
	DC	0.78...1.5	0.78...1.5	0.7...1.5	16-30	0.75...1.5
holding voltage (U <sub>N</sub> )	AC / DC	-   0.35	-   0.4	-   0.4	-	-   0.4
must drop-out voltage (U <sub>N</sub> )	AC / DC	-   0.05	-   0.1	-   0.05	10	-   0.1
<b>technical data</b>						
mechanical life AC/DC	cycles	-   10.10 <sup>6</sup>	-   20.10 <sup>6</sup>	-   10.10 <sup>6</sup>	-	-   10.10 <sup>6</sup>
electrical life AC/DC	cycles	-   10.10 <sup>3</sup>	-   100.10 <sup>3</sup>	-   60.10 <sup>3</sup>	-	-   100.10 <sup>3</sup>
operate / release time	ms	6   2	6   4	5   3	0.1   0.3	7   3
insulation according to EN 61810-1 ed.2		1.2kV/2	4kV/2	4kV/3	-	2.5kV/2
insulation between coil and contacts (1.2/50 μs) kV		1.5	5	6	2.5	4
dielectric strength between open contacts	V AC	750	1000	1000	-	1000
ambient temperature range	°C	-40...+85	-40...+85	-40...+85	-20...+60	-40...+85
termination		PCB	PCB	PCB	PCB	PCB
dimensions (H) x (W) x (D)		11.4 x 20.3 x 10.1	10.7 x 20.3 x 10.2	15 x 28 x 5	15.5 x 28 x 5	17.5 x 21.5 x 15.5
variations		-	-	-	-	-



## Plug-in relays

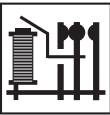


40 series						44 series		41 series		43 series		46 series			
industrial PCB relay 5mm pinning						low profile PCB relay 5mm pinning		low profile PCB relay 3.5mm 5.0mm		low profile slimline 3.2mm pinning		industrial relay plug-in			
40.51		40.61		40.52		44.52	44.62	41.31	41.52	43.41		46.52		46.61	
1 CO (SPDT)		1 CO (SPDT)		2 CO (DPDT)		2 CO (DPDT)		1 CO	2 CO	1 CO (SPDT)		2 CO (DPDT)		1 CO (SPDT)	
10		16		8		6	10	12	8	10		8		16	
20		30		15		10	20	25	15	15		15		25	
250		250		250		250		250		250		250		250	
400		400		250		400		400		400		400		400	
2500		4000		2000		1500	1800	3000	2000	2500		2000		4000	
500		750		400		250	500	600	400	500		350		750	
0.37		0.55		0.3		0.185	0.37	0.5	0.3	-		0.37		0.55	
10/0.3/0.12		16/0.3/0.12		8/0.3/0.12		6/0.3/0.13		12/3/12	8/-/-	10/0.3/0.12		6/0.5/0.15		12/0.5/0.15	
300(5/5)		500(10/5)		300(5/5)		300(5/5)		300(5/5)		300(5/5)		300(5/5)		300(5/5)	
AgNi		AgCdO		AgNi		AgNi		AgNi		AgCdO		AgNi		AgNi	
6 - 12 - 24 - 48 - 60 - 110 - 230						-		-		-		12 - 24 - 48 - 120 - 230			
5 - 6 - 7 - 9 - 12 - 14 - 18 - 24 - 28 - 36 - 48 - 60 - 110						6 ... 110		12 ... 110		6 ... 48		12 - 24 - 48 - 110			
1.2	0.65	1.2	0.65	1.2	0.65	-	0.65	-	0.4	-	0.25	1.2	0.5	1.2	0.5
0.8...1.1		0.8...1.1		0.8...1.1		-		-		-		0.8...1.1		0.8...1.1	
0.73...1.5		0.73...1.5		0.73...1.5		0.73...1.5		0.7...1.5		0.7...1.5		0.73...1.1		0.73...1.1	
0.8	0.4	0.8	0.4	0.8	0.4	-	0.4	-	0.4	-	0.4	0.8	0.4	0.8	0.4
0.2	0.1	0.2	0.1	0.2	0.1	-	0.1	-	0.1	-	0.05	0.2	0.1	0.2	0.1
10.10 <sup>6</sup>	20.10 <sup>6</sup>	10.10 <sup>6</sup>	20.10 <sup>6</sup>	10.10 <sup>6</sup>	20.10 <sup>6</sup>	-	20.10 <sup>6</sup>	-	30.10 <sup>6</sup>	-	10.10 <sup>6</sup>	10.10 <sup>6</sup>		10.10 <sup>6</sup>	
200.10 <sup>3</sup>		100.10 <sup>3</sup>		100.10 <sup>3</sup>		100.10 <sup>3</sup>		150.10 <sup>3</sup>	80.10 <sup>3</sup>	100.10 <sup>3</sup>		100.10 <sup>3</sup>		100.10 <sup>3</sup>	
7	3	7	3	7	3	8	5	5	4	6	4	10	3	15	5
4kV/3		4kV/3		4kV/2		4kV/2		4kV/3		4kV/3		4kV/3		4kV/3	
6 (8mm)		6 (8mm)		6 (8mm)		6 (8mm)		6 (8mm)		6 (10mm)		6 (8mm)		6 (8mm)	
1000		1000		1000		1000		1000		1000		1000		1000	
-40...+85		-40...+85		-40...+85		-40...+85		-40...+85		-40...+85		-40...+70		-40...+70	
PCB		PCB		PCB		PCB		PCB		PCB		plug-in		plug-in	
25 x 29 x 12.4		25 x 29 x 12.4		25 x 29 x 12.4		25 x 29 x 12.4		15.7 x 29 x 12.7		15.4 x 30.2 x 10.2		32.8 x 29 x 12.4		32.8 x 29 x 12.4	
-		-		-		-		-		-		PCB / base mount		PCB / base mount	

## Plug-in relays



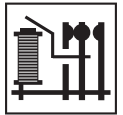
type		55 series		56 series		60 series	
<b>description</b>		miniature industrial relays		miniature industrial relays		general purpose relays	
<b>contact specification</b>		<b>55.32</b>	<b>55.34</b>	<b>56.32</b>	<b>56.34</b>	<b>60.12</b>	<b>60.13</b>
contact configuration		2 CO	4 CO	2 CO	4 CO	2 CO	3 CO
rated current	A	10	7	12		10	
maximum peak current	A	20	15	20		20	
rated voltage	V	250	250	250		250	
maximum peak voltage	V	400	250	400		400	
rated load AC1	VA	2500	1750	3000		2500	
rated load AC15 (230V AC)	VA	500	350	700		500	
single phase motor (230V AC)	kW	0.37	0.125	0.55		0.37	
breaking capacity DC1 30, 110, 230V	A	10/25/12	7	12/0.25/0.12		10/0.4/0.15	
minimum switching load	mW (V / mA)	300(5/5)		500(10/5)		500(5/10)	
standard contact material		AgNi		AgNi		AgNi	
<b>coil specification</b>							
nominal voltage (U <sub>N</sub> )	V AC	6 - 12 - 24 - 48 - 60 - 110 - 230		6 - 12 - 24 - 48 - 60 - 110 - 230 - 400		6 - 12 - 24 - 36 - 48 - 60 - 110 - 240 - 400	
	V DC	6 - 12 - 24 - 48 - 60 - 110		6 - 12 - 24 - 48 - 60 - 110 - 220		6 - 12 - 24 - 36 - 48 - 60 - 110 - 220	
rated power AC/DC	VA (50Hz) / W	1.5/1		1.5/1	2/1.3	2.2/1.3	
operating range (U <sub>N</sub> )	AC	0.8 ... 1.1		0.8 ... 1.1		0.8 ... 1.1	
	DC	0.8 ... 1.1		0.8 ... 1.1		0.8 ... 1.1	
holding voltage (U <sub>N</sub> )	AC / DC	0.8	0.5	0.8	0.6	0.80	0.5
must drop-out voltage (U <sub>N</sub> )	AC / DC	0.2	0.1	0.2	0.1	0.2	0.1
<b>technical data</b>							
mechanical life AC/DC	cycles	20.10 <sup>6</sup>	50.10 <sup>6</sup>	20.10 <sup>6</sup>	50.10 <sup>6</sup>	20.10 <sup>6</sup>	50.10 <sup>6</sup>
electrical life AC/DC	cycles	200.10 <sup>3</sup>		200.10 <sup>3</sup>		200.10 <sup>3</sup>	
operate / release time	ms	9	3	8	8	9	9
insulation according to EN 61810-1 ed.2		3.6kV/2		4kV/3		4kV/3	3.6kV/3
insulation between coil and contacts (1.2/50 μs)	kV	4kV		4		3.6	
dielectric strength between open contacts	V AC	1000		1000		1000	
ambient temperature range	°C	-40...+85		-40...+70		-40...+70	
termination		plug-in		plug-in		plug-in	
dimensions (H) x (W) x (D)		37.2 X 20.7 X 27.7		37.2 X 20.7 X 27.7	41 (4 CO)	54.2 X 32.5 X 36.4	
variations		PCB / base mount		PCB / base mount		fast-on	



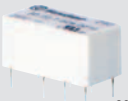
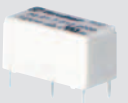



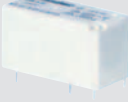


## Plug-in and step relays



62 series		65 series		66 series		19 series		20 series			26 series	
general purpose power relays		high power relays		high power relays		modular DIN rail mount relays		modular step relays			base mount relays	
<b>62.32</b>	<b>62.33</b>	<b>65.31</b>	<b>65.3103</b>	<b>66.82</b>		<b>19.21</b>		<b>20.23</b>	<b>20.26</b>	<b>20.28</b>	<b>26.03</b>	
2 CO	3 CO	1 O + 1 C	1 NO	2 CO (DPDT)		1 CO (SPCO)		1NO+1NC	2NO	2NO	1 NO + 1 NC (step)	
16		20	30	30 NO	10 NC	10		16			10	
30		40	50	50 NO	20 NC	15		30			20	
250		250		250		250		250			250	
400		400		400		400		400			400	
4000		5000	7500	7500(NO)	2500(NC)	2500		4000			2500	
750		1000	1250	1200(NO)		500		750			500	
0.8	1.5(3PH)	1.1	1.5	1.5(NO)		0.44		-			-	
16 / 0.6 / 0.4		20 / 0.8 / 0.5	30 / 1.1 / 0.7		25 / 0.7 / 0.3		10 / 0.3 / 0.12		-			-
1000 (10 / 10)		1000 (10 / 10)		1000 (10 / 10)		300(5/5)		1000(10/10)			1000(10/10)	
AgCdO		AgCdO		AgCdO		AgSnO <sub>2</sub>		AgNi			AgNi	
6-12-24-48-60-110-230-400		12-24-48-60-110-230-400		12-24-110-230		24		12-24-48-110-230			12-24-48-110-230	
6-12-24-48-60-110-220		12-24-48-60-110-220		12-24-110		24		12-24-48			-	
2.2	1.3	2.2	1.3	3.6	1.7	0.6/0.4		6.5/5			4.5	
0.8 - 1.1		0.8 - 1.1		0.8 - 1.1		0.8 ... 1.1		0.85 ... 1.1			0.8 ... 1.1	
0.8 - 1.1		0.8 - 1.1		0.8 - 1.1		0.8 ... 1.1		0.90 ... 1.1			-	
0.8	0.6	0.8	0.6	0.8	0.5	0.80		pulse duration 0.1s-1h		pulse duration 0.1s-1h		
0.2	0.1	0.2	0.1	0.2	0.1	0.20		-			-	
10.10 <sup>6</sup>		30.10 <sup>6</sup>		10.10 <sup>6</sup>		10.10 <sup>6</sup>		300.10 <sup>3</sup>			300.10 <sup>3</sup>	
100.10 <sup>3</sup>		80.10 <sup>3</sup>		100.10 <sup>3</sup>		100.10 <sup>3</sup>		100.10 <sup>3</sup>			100.10 <sup>3</sup>	
10	10	10	12	8	15	-		-			-	
4kV/3		4kV/3		4kV/3		4KV		-			-	
6		4		6 (8mm)		4		4			4	
1500		1500	2500	1500		1000		-			-	
-40...+70		-40...+75		-40...+70		-10...+50		-40...+40			-40...+40	
Plug-in	Fast-on 4.8	Fast-on 6.3		Fast-on 6.3		Screw		Screw			Screw	
47.6 X 38.2 X 35.8		52.2 X 32.2 X 36.5		31 X 51.5 X 33.5		84 X 11.2 X 57		84 X 17.4 X 59			22 X 45 X 46.6	
PCB		PCB		PCB		auto - off - on		auto - off - on			auto - off - on	



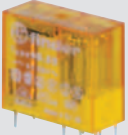
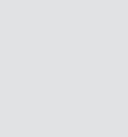








## PCB mount relays

	type	description		current	coil	price
	<b>30 Series</b>	<i>sub-miniature DIL relay</i>		<i>(11.4 x 20.3 x 10.1mm)</i>		
		<ul style="list-style-type: none"> <li>• 2-pole changeover contacts (low level switching capability) 1.25A</li> <li>• sub-miniature – industry standard DIL package</li> <li>• sensitive DC coil – 200mW</li> <li>• wash tight: RT-III</li> </ul>				
30.22	<b>30.22.7.012</b>	sealed DIL PCB relay	2A	2 changeover	12VDC	<b>24.50</b>
	<b>30.22.7.024</b>	sealed DIL PCB relay	2A	2 changeover	24VDC	<b>24.50</b>
	<b>30.22.7.048</b>	sealed DIL PCB relay	2A	2 changeover	48VDC	<b>30.00</b>
	<b>32 Series</b>	<i>sub-miniature low profile relay</i>		<i>(10.7 x 20 x 10.7mm)</i>		
		<ul style="list-style-type: none"> <li>• 1-pole changeover contact 6A</li> <li>• sub-miniature – low profile package</li> <li>• sensitive DC Coil – 200mW</li> <li>• wash tight: RT-III</li> </ul>				
32.31	<b>32.21.7.012</b>	low profile PCB relay	6A	1 changeover	12VDC	<b>20.20</b>
	<b>32.21.7.024</b>	low profile PCB relay	6A	1 changeover	24VDC	<b>20.20</b>
	<b>32.21.7.048</b>	low profile PCB relay	6A	1 changeover	48VDC	<b>23.00</b>
	<b>34 Series</b>	<i>ultra-slim relay (5mm)</i>		<i>(15 x 28 x 5mm)</i>		
		<ul style="list-style-type: none"> <li>• 1-pole changeover contact 6A</li> <li>• ultra-slim (5mm) package</li> <li>• sensitive DC coil – 170mW</li> <li>• 8/8mm clearance/creepage distance – 6kV (1.2/50us) insulation, coil-contacts</li> </ul>				
34.51	<b>34.51.7.05</b>	sealed ultra-slim PCB relay	6A	1 changeover	5VDC	<b>43.00</b>
	<b>34.51.7.06</b>	sealed ultra-slim PCB relay	6A	1 changeover	6VDC	<b>43.00</b>
	<b>34.51.7.012</b>	sealed ultra-slim PCB relay	6A	1 changeover	12VDC	<b>31.00</b>
	<b>34.51.7.024</b>	sealed ultra-slim PCB relay	6A	1 changeover	24VDC	<b>31.00</b>
	<b>34.51.7.048</b>	sealed ultra-slim PCB relay	6A	1 changeover	48VDC	<b>43.00</b>
	<b>34.51.7.060</b>	sealed ultra-slim PCB relay	6A	1 changeover	60VDC	<b>49.50</b>
	<b>93.11</b>	PCB-mount socket with hinged retain/release clip for 34-series				<b>14.00</b>
93.11	<b>36 Series</b>	<i>miniature PCB relay</i>		<i>(17.5 x 18 x 15.5mm)</i>		
		<ul style="list-style-type: none"> <li>• 1-pole changeover contact 10A</li> <li>• miniature – “sugar cube” package</li> <li>• DC coil – 400mW</li> <li>• wash tight: RT-III</li> </ul>				
	<b>36.11.9.012.4</b>	“sugar cube” PCB relay	10A	1 changeover	12VDC	<b>10.80</b>
36.11	<b>36.11.9.024.4</b>	“sugar cube” PCB relay	10A	1 changeover	24VDC	<b>10.80</b>
	<b>41 Series</b>	<i>low-profile PCB relays</i>		<i>(15.7 x 29 x 12.5mm)</i>		
		<ul style="list-style-type: none"> <li>• 1 or 2 pole</li> <li>• DC coil</li> <li>• 8mm 6kV (1.2/50us) isolation coil-contacts</li> <li>• flux proof – RT-II</li> </ul>				
41.31	<b>41.31.9.012</b>	low-profile PCB relay	12A	1 changeover	12VDC	<b>24.00</b>
	<b>41.31.9.024</b>	low-profile PCB relay	12A	1 changeover	24VDC	<b>24.00</b>
	<b>41.52.9.012</b>	low-profile PCB relay	8A	2 changeover	12VDC	<b>28.00</b>
	<b>41.52.9.024</b>	low-profile PCB relay	8A	2 changeover	24VDC	<b>28.00</b>
	<b>43 Series</b>	<i>low-profile slimline PCB relays</i>		<i>(10.2mm) (15.4 x 30.2 x 10.2mm)</i>		
		<ul style="list-style-type: none"> <li>• sensitive coil – 250mW</li> <li>• very high coil-contact insulation 10mm, 6kV (1.2/50us)</li> <li>• flux proof – RT-II</li> </ul>				
43.51	<b>43.41.7.012.2</b>	low-profile slimline PCB relay	10A	1 changeover	12VDC	<b>19.50</b>
	<b>43.41.7.024.2</b>	low-profile slimline PCB relay	10A	1 changeover	24VDC	<b>19.50</b>
	<b>95.23SNA</b>	PCB-mount socket for 43 series with retaining clip				<b>9.00</b>
95.23						

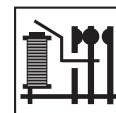


## PCB mount / solid-state relays

	type	description		current	coil voltage	price	
	<b>40 series</b>	<i>miniature PCB relays</i>		<i>(25 x 29 x 12.4mm)</i>			
		<ul style="list-style-type: none"> <li>• DC and AC coils</li> <li>• 8mm, 6kV</li> <li>• flux-proof RT-II</li> <li>• 95 series sockets (for plug-in)</li> </ul>					
	40.51	40.51.8.012	miniature PCB relay	10A	1 c/over 12VAC	27.00	
		40.51.8.024	miniature PCB relay	10A	1 c/over 24VAC	27.00	
		40.51.8...	miniature PCB relay	10A	1 c/over other voltages 6-60VAC	31.00	
		40.51.8.110	miniature PCB relay	10A	1 c/over 110VAC	35.00	
		40.51.8.240	miniature PCB relay	10A	1 c/over 240VAC	44.50	
	40.61	40.51.9.012	miniature PCB relay	10A	1 c/over 12VDC	21.00	
		40.51.9.024	miniature PCB relay	10A	1 c/over 24VDC	21.00	
		40.51.9...	miniature PCB relay	10A	1 c/over other voltages 6-60VDC	28.00	
		40.51.9.110	miniature PCB relay	10A	1 c/over 110VDC	32.00	
	40.62	40.61.8.012	miniature PCB relay	16A	1 c/over 12VAC	29.00	
		40.61.8.024	miniature PCB relay	16A	1 c/over 24VAC	29.00	
		40.61.8...	miniature PCB relay	16A	1 c/over other voltages 6-60VAC	32.00	
		40.61.8.110	miniature PCB relay	16A	1 c/over 110VAC	36.00	
		40.61.8.240	miniature PCB relay	16A	1 c/over 240VAC	46.00	
	40.63	40.61.9.012	miniature PCB relay	16A	1 c/over 12VDC	22.00	
		40.61.9.024	miniature PCB relay	16A	1 c/over 24VDC	22.00	
		40.61.9...	miniature PCB relay	16A	1 c/over other voltages 6-60VDC	29.00	
		40.61.9.110	miniature PCB relay	16A	1 c/over 110VDC	33.00	
	40.52	40.52.8.012	miniature PCB relay	8A	2 c/over 12VAC	32.00	
		40.52.8.024	miniature PCB relay	8A	2 c/over 24VAC	32.00	
		40.52.8...	miniature PCB relay	8A	2 c/over other voltages 6-60VAC	36.00	
		40.52.8.110	miniature PCB relay	8A	2 c/over 110VAC	40.00	
		40.52.8.240	miniature PCB relay	8A	2 c/over 240VAC	49.50	
	40.53	40.52.9.012	miniature PCB relay	8A	2 c/over 12VDC	26.00	
		40.52.9.024	miniature PCB relay	8A	2 c/over 24VDC	26.00	
		40.52.9...	miniature PCB relay	8A	2 c/over other voltages 6-60VDC	34.00	
		40.52.9.110	miniature PCB relay	8A	2 c/over 110VDC	37.00	
	95.15	<b>44 series</b> flux-proof miniature PCB relays <i>(25 x 29 x 12.4mm)</i>					
		44.62.9012	miniature PCB relay	10A	2 c/over 12VDC	36.00	
		44.62.9024	miniature PCB relay	10A	2 c/over 24VDC	36.00	
	95.05	<b>Sockets and accessories (40 and 44 series relays)</b>					
		95.15.2SMA	PCB mount socket for relay		40/44 series	10.30	
		95.05.SPA*	surface/DIN mount socket (screw terminal)		40/44 series	34.00	
		095.18	8 way jumper link for sockets		95.05/95.55	21.00	
		060.72	sheet of marker tags (72 tags) for sockets		95.05/95.55	92.00	
		* accepts plug-in LED, diode, timing modules ( <i>plug directly into sockets</i> ) (See pg 12)					
		<b>Solid state PCB relays</b>					
	type	description		current	operating range	switching voltage	price
	<b>34.81 Series</b>	Ultra-slim solid state relays - ultra slim <i>(15.5 x 28 x 5mm)</i>					
		<ul style="list-style-type: none"> <li>• single circuit output switching options</li> <li>• silent high speed switching with long electrical life</li> <li>• ultra-slim package (5mm)</li> <li>• sensitive DC input circuits - wash tight RT-III</li> </ul>					
	34.81	34.81.7.005.9024	solid state relay	2A	3.5-12VDC	1.5-24VDC	125.00
		34.81.7.024.9024	solid state relay	2A	16-30VDC	1.5-24VDC	125.00
		34.81.7.024.8240	solid state relay	2A	16-30VDC	12-240VAC	132.00
	41.81	<b>41.81 Series</b> <i>solid state relays</i> <i>(15.7 x 29 x 12.7mm)</i>					
		<ul style="list-style-type: none"> <li>• single circuit output switching options</li> <li>• silent, high speed switching with long electrical life</li> <li>• low profile (15.7mm)</li> <li>• wash tight RT-III</li> </ul>					
		41.81.7.024.9024	solid state relay	5A	10-32VDC	1.5-35VDC	133.00
		41.81.7.024.8240	solid state relay	3A	10-32VDC	12-275VAC	128.00

new





## Miniature industrial relays

	type	description	current	coil voltage	price
	<b>46 Series</b>	miniature industrial relays	(32.8 x 29 x 12.4mm)		
		<ul style="list-style-type: none"> <li>• plug-in or direct connection via robust faston terminals</li> <li>• AC and DC coil voltages</li> <li>• lockable test/override button, mechanical flag indication</li> <li>• 8mm, 6kV (1.2/50us) Isolation, coil-contacts</li> </ul>			
	<b>46.61.8012</b>	miniature industrial relay	16A	1 changeover 12VAC	<b>42.00</b>
	<b>46.61.8024</b>	miniature industrial relay	16A	1 changeover 24VAC	<b>42.00</b>
	<b>46.61.8048</b>	miniature industrial relay	16A	1 changeover 48VAC	<b>46.00</b>
	<b>46.61.8110</b>	miniature industrial relay	16A	1 changeover 110VAC	<b>49.00</b>
	<b>46.61.8230</b>	miniature industrial relay	16A	1 changeover 230VAC	<b>59.00</b>
	<b>46.61.9012</b>	miniature industrial relay	16A	1 changeover 12VDC	<b>34.00</b>
	<b>46.61.9024</b>	miniature industrial relay	16A	1 changeover 24VDC	<b>34.00</b>
	<b>46.61.9048</b>	miniature industrial relay	16A	1 changeover 48VDC	<b>41.00</b>
	<b>46.61.9110</b>	miniature industrial relay	16A	1 changeover 110VDC	<b>45.00</b>
	<b>46.52.8012</b>	miniature industrial relay	8A	2 changeover 12VAC	<b>48.00</b>
	<b>46.52.8024</b>	miniature industrial relay	8A	2 changeover 24VAC	<b>48.00</b>
	<b>46.52.8048</b>	miniature industrial relay	8A	2 changeover 48VAC	<b>51.00</b>
	<b>46.52.8110</b>	miniature industrial relay	8A	2 changeover 110VAC	<b>54.00</b>
	<b>46.52.8230</b>	miniature industrial relay	8A	2 changeover 230VAC	<b>66.00</b>
	<b>46.52.9012</b>	miniature industrial relay	8A	2 changeover 12VDC	<b>39.00</b>
	<b>46.52.9024</b>	miniature industrial relay	8A	2 changeover 24VDC	<b>39.00</b>
	<b>46.52.9048</b>	miniature industrial relay	8A	2 changeover 48VDC	<b>47.00</b>
	<b>46.52.9110</b>	miniature industrial relay	8A	2 changeover 110VDC	<b>52.00</b>
	<b>Extra charges</b>				
	<b>00.54</b>	internal LED indication AC			<b>10.00</b>
	<b>00.74</b>	internal LED indication DC		(double LED non-polarised)	<b>10.00</b>
	<b>Sockets and accessories</b>				
	<b>046.07</b>	DIN rail mountable bracket		for 46 series relays	<b>15.00</b>
	<b>97.01.SPA*</b>	surface/DIN rail mount screw terminal socket		for relay 46.61	<b>36.00</b>
	<b>97.02.SPA*</b>	surface/DIN rail mount screw terminal socket		for relay 46.52	<b>40.00</b>
	<b>97.11</b>	PCB mount socket		for relay 46.61	<b>20.00</b>
	<b>095.18</b>	8 way jumper link		for sockets 97.01/02	<b>21.00</b>
	<b>060.72</b>	sheet of marking tags (72 tags)		for sockets 97.01/02	<b>91.00</b>
	* accepts plug-in LED, diode, timing modules (plug directly into sockets) (see pg 12)				
	<b>55 Series</b>	miniature PCB relays	(36 x 21 x 28mm)		
		<ul style="list-style-type: none"> <li>• AC and DC coil voltages</li> <li>• 2, 3 and 4-pole versions</li> <li>• cadmium free contacts</li> </ul>			
	<b>PCB mount version</b>				
	<b>55.12.□012</b>	general purpose PCB relay	10A	2 changeover 12V □	<b>50.20</b>
	<b>55.12.□024</b>	general purpose PCB relay	10A	2 changeover 24V □	<b>50.20</b>
	<b>55.12.□.....</b>	general purpose PCB relay	10A	2 changeover 36-110V □	<b>59.50</b>
	<b>55.12. 8 230</b>	general purpose PCB relay	10A	2 changeover 230VAC	<b>55.50</b>
	<b>55.12. 9 220</b>	general purpose PCB relay	10A	2 changeover 220VDC	<b>101.00</b>
	<b>55.14.□012</b>	general purpose PCB relay	7A	4 changeover 12V □	<b>53.50</b>
	<b>55.14.□024</b>	general purpose PCB relay	7A	4 changeover 24V □	<b>53.50</b>
	<b>55.14.□.....</b>	general purpose PCB relay	7A	4 changeover 36-110V □	<b>62.50</b>
	<b>55.14. 8 230</b>	general purpose PCB relay	7A	4 changeover 230VAC	<b>59.50</b>
	<b>55.14. 9 220</b>	general purpose PCB relay	7A	4 changeover 220VDC	<b>104.00</b>
	□ 8=AC / 9=DC				



## Miniature industrial relays



56.32



55.32



94.14



94.34



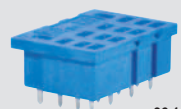
94.02



56.32



56.34



96.14



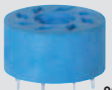


96.04

type	description	current	coil voltage	price
<b>55 Series</b> miniature plug-in relays (37.2 x 21 x 28mm)				
• lockable test button with mechanical flag indication				
55.32.□012	general purpose plug-in relay	10A	2 changeover 12V □	49.60
55.32.□024	general purpose plug-in relay	10A	2 changeover 24V □	49.60
55.32.□.....	general purpose plug-in relay	10A	2 changeover 36-110V □	58.50
55.32. 8 230	general purpose plug-in relay	10A	2 changeover 230VAC	55.00
55.32. 9 220	general purpose plug-in relay	10A	2 changeover 220VDC	100.00
55.34.□012	general purpose plug-in relay	7A	4 changeover 12V □	52.50
55.34.□024	general purpose plug-in relay	7A	4 changeover 24V □	52.50
55.34.□.....	general purpose plug-in relay	7A	4 changeover 36-110V □	62.00
55.34. 8 230	general purpose plug-in relay	7A	4 changeover 230VAC	58.00
55.34. 9 220	general purpose plug-in relay	7A	4 changeover 220VDC	103.00
<i>Other voltages available on request.</i>				
□ 8=AC / 9=DC				
<b>Extra charges</b>				
000.1	sealed wash tight RTIII (only for 5512/5514 PCB relays)			35.00
00.54	internal LED indication AC			5.00
00.74	internal LED indication DC		(dual LED non-polarised)	5.00
<b>Sockets and accessories</b>				
94.12.SMA	PCB mount socket		for relay 55.32	14.80
94.14.SMA	PCB mount socket		for relay 55.34	15.50
94.32.SMA	flange mount solder terminal		for relay 55.32	14.80
94.34.SMA	flange mount solder terminal		for relay 55.34	15.50
94.02.SPA*	surface/DIN mount screw terminal socket		for relay 55.32	36.50
94.04.SPA*	surface/DIN mount screw terminal socket		for relay 55.34	40.20
094.06	6 way jumper link		for sockets 94.02/04	20.00
060.72	sheet of marking tags (72 tags)		for sockets 94.02/04	91.00
* accepts plug-in LED, diode,timing modules ( <i>plug directly into sockets</i> ) (see pg 12)				
<b>56 Series</b> miniature power relays (38 x 21(2p)41(4p)x 28mm)				
• 2 and 4-pole versions				
• cadmium-free contacts				
• AC and DC coils				
• lockable test button with mechanical flag indication				
<b>2-pole industrial relays</b> (37 x 20.7 x 27.7mm)				
56.32.8012	plug-in/fast-on 187 relay	12A	2 changeover 12VAC	65.00
56.32.8024	plug-in/fast-on 187 relay	12A	2 changeover 24VAC	65.00
56.32.8048	plug-in/fast-on 187 relay	12A	2 changeover 48VAC	74.00
56.32.8110	plug-in/fast-on 187 relay	12A	2 changeover 110VAC	74.00
56.32.8230	plug-in/fast-on 187 relay	12A	2 changeover 230VAC	74.00
56.32.9012	plug-in/fast-on 187 relay	12A	2 changeover 12VDC	65.00
56.32.9024	plug-in/fast-on 187 relay	12A	2 changeover 24VDC	65.00
56.32.9048	plug-in/fast-on 187 relay	12A	2 changeover 48VDC	74.00
56.32.9060	plug-in/fast-on 187 relay	12A	2 changeover 60VDC	74.00
56.32.9110	plug-in/fast-on 187 relay	12A	2 changeover 110VDC	74.00
56.32.9220	plug-in/fast-on 187 relay	12A	2 changeover 220VDC	118.00
<b>4-pole industrial relays</b> (37 x 40.8 x 27.7mm)				
56.34.8012	plug-in/fast-on 187 relay	12A	4 changeover 12VAC	108.00
56.34.8024	plug-in/fast-on 187 relay	12A	4 changeover 24VAC	108.00
56.34.8048	plug-in/fast-on 187 relay	12A	4 changeover 48VAC	116.00
56.34.8110	plug-in/fast-on 187 relay	12A	4 changeover 110VAC	116.00
56.34.8230	plug-in/fast-on 187 relay	12A	4 changeover 230VAC	116.00
56.34.9012	plug-in/fast-on 187 relay	12A	4 changeover 12VDC	108.00
56.34.9024	plug-in/fast-on 187 relay	12A	4 changeover 24VDC	108.00
56.34.9048	plug-in/fast-on 187 relay	12A	4 changeover 48VDC	116.00
56.34.9060	plug-in/fast-on 187 relay	12A	4 changeover 60VDC	116.00
56.34.9110	plug-in/fast-on 187 relay	12A	4 changeover 110VDC	116.00
56.34.9220	plug-in/fast-on 187 relay	12A	4 changeover 220VDC	116.00
<i>Above relays also available in PCB mount (replace 56.3_ with 56.4_)</i>				
<b>Sockets miniature power relays</b>				
96.12.SMA	PCB mount socket		for relay 56.32	16.00
96.14.SMA	PCB mount socket		for relay 56.34	20.00
96.02.SPA*	surface/DIN mount screw terminal socket		for relay 56.32	46.00
96.04.SMA*	surface/DIN mount screw terminal socket		for relay 56.34	54.00
* accepts plug-in LED, diode,timing modules ( <i>plug directly into sockets</i> ) (see pg 12)				









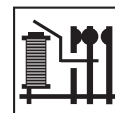
## PCB mount relays

	type	description		current	coil voltage	price
	<b>60 Series</b>	general purpose relays		(54.2 x 32.5 x 36.4mm)		
		<ul style="list-style-type: none"> <li>• 2 and 3 pole changeover contacts</li> <li>• cadmium-free contacts</li> <li>• lockable test button with mechanical flag indication</li> </ul>				
		<b>2-pole (8-pin plug-in)</b>				
	<b>60.12.8006</b>	plug-in terminal industrial relay	10A	2 changeover	6VAC	<b>75.00</b>
	<b>60.12.8012</b>	plug-in terminal industrial relay	10A	2 changeover	12VAC	<b>67.00</b>
	<b>60.12.8024</b>	plug-in terminal industrial relay	10A	2 changeover	24VAC	<b>67.00</b>
	<b>60.12.8036</b>	plug-in terminal industrial relay	10A	2 changeover	36VAC	<b>75.00</b>
	<b>60.12.8048</b>	plug-in terminal industrial relay	10A	2 changeover	48VAC	<b>75.00</b>
	<b>60.12.8060</b>	plug-in terminal industrial relay	10A	2 changeover	60VAC	<b>75.00</b>
	<b>60.12.8110</b>	plug-in terminal industrial relay	10A	2 changeover	110VAC	<b>75.00</b>
	<b>60.12.8230</b>	plug-in terminal industrial relay	10A	2 changeover	230VAC	<b>72.00</b>
	<b>60.12.8400</b>	plug-in terminal industrial relay	10A	2 changeover	400VAC	<b>90.00</b>
	<b>60.12.9006</b>	plug-in terminal industrial relay	10A	2 changeover	6VDC	<b>75.00</b>
	<b>60.12.9012</b>	plug-in terminal industrial relay	10A	2 changeover	12VDC	<b>67.00</b>
	<b>60.12.9024</b>	plug-in terminal industrial relay	10A	2 changeover	24VDC	<b>67.00</b>
	<b>60.12.9036</b>	plug-in terminal industrial relay	10A	2 changeover	36VDC	<b>75.00</b>
	<b>60.12.9048</b>	plug-in terminal industrial relay	10A	2 changeover	48VDC	<b>75.00</b>
	<b>60.12.9060</b>	plug-in terminal industrial relay	10A	2 changeover	60VDC	<b>75.00</b>
	<b>60.12.9110</b>	plug-in terminal industrial relay	10A	2 changeover	110VDC	<b>73.00</b>
	<b>60.12.9220</b>	plug-in terminal industrial relay	10A	2 changeover	220VDC	<b>106.00</b>
		<b>3-pole (11-pin plug-in)</b>				
	<b>60.13.8006</b>	plug-in terminal industrial relay	10A	3 changeover	6VAC	<b>76.00</b>
	<b>60.13.8012</b>	plug-in terminal industrial relay	10A	3 changeover	12VAC	<b>70.00</b>
	<b>60.13.8024</b>	plug-in terminal industrial relay	10A	3 changeover	24VAC	<b>70.00</b>
	<b>60.13.8036</b>	plug-in terminal industrial relay	10A	3 changeover	36VAC	<b>76.00</b>
	<b>60.13.8048</b>	plug-in terminal industrial relay	10A	3 changeover	48VAC	<b>76.00</b>
	<b>60.13.8060</b>	plug-in terminal industrial relay	10A	3 changeover	60VAC	<b>76.00</b>
	<b>60.13.8110</b>	plug-in terminal industrial relay	10A	3 changeover	110VAC	<b>76.00</b>
	<b>60.13.8230</b>	plug-in terminal industrial relay	10A	3 changeover	230VAC	<b>74.00</b>
	<b>60.13.8400</b>	plug-in terminal industrial relay	10A	3 changeover	400VAC	<b>92.00</b>
	<b>60.13.9006</b>	plug-in terminal industrial relay	10A	3 changeover	6VDC	<b>76.00</b>
	<b>60.13.9012</b>	plug-in terminal industrial relay	10A	3 changeover	12VDC	<b>70.00</b>
	<b>60.13.9024</b>	plug-in terminal industrial relay	10A	3 changeover	24VDC	<b>70.00</b>
	<b>60.13.9036</b>	plug-in terminal industrial relay	10A	3 changeover	36VDC	<b>76.00</b>
	<b>60.13.9048</b>	plug-in terminal industrial relay	10A	3 changeover	48VDC	<b>76.00</b>
	<b>60.13.9060</b>	plug-in terminal industrial relay	10A	3 changeover	60VDC	<b>76.00</b>
	<b>60.13.9110</b>	plug-in terminal industrial relay	10A	3 changeover	110VDC	<b>74.00</b>
	<b>60.13.9220</b>	plug-in terminal industrial relay	10A	3 changeover	220VDC	<b>108.00</b>
		<b>Extra charges</b>				
	<b>00.54</b>	internal LED indication AC				<b>20.00</b>
	<b>00.74</b>	internal LED indication DC (double LED non-polarised)				<b>20.00</b>
		<b>Sockets and accessories for 60 series relays</b>				
	<b>90.12</b>	8 pin	panel mnt (flange)	solder terminal socket		<b>12.70</b>
	<b>90.13</b>	11 pin	panel mnt (flange)	solder terminal socket		<b>13.10</b>
	<b>90.14</b>	8 pin	P.C.B mount socket	terminal dia. 20.5mm		<b>12.70</b>
	<b>90.14.1</b>	8 pin	P.C.B mount socket	terminal dia. 17.5mm		<b>12.70</b>
	<b>90.15</b>	11 pin	P.C.B mount socket	terminal dia. 22.0mm		<b>13.10</b>
	<b>90.15.1</b>	11 pin	P.C.B mount socket	terminal dia. 19.0mm		<b>13.10</b>
	<b>90.20 SMA</b>	8 pin	surface / DIN mount screw terminal socket		standard	<b>36.00</b>
	<b>90.21 SMA</b>	11 pin	surface / DIN mount screw terminal socket		standard	<b>40.00</b>
	<b>90.22 SMA</b>	8 pin	surface / DIN mount screw terminal socket		oval	<b>23.00</b>
	<b>90.23 SMA</b>	11 pin	surface / DIN mount screw terminal socket		oval	<b>26.00</b>
	<b>90.26 SMA</b>	8 pin	surface / DIN mount screw terminal socket		square	<b>37.00</b>
	<b>90.27 SMA</b>	11 pin	surface / DIN mount screw terminal socket		square	<b>41.00</b>
	<b>90.48</b>	8 pin	surface / DIN mount screw terminal socket		rectangular	<b>44.00</b>
	<b>90.49</b>	11 pin	surface / DIN mount screw terminal socket		rectangular	<b>49.00</b>
	<b>90.02 SMA*</b>	8 pin	surface / DIN mount screw terminal socket		for modules	<b>39.00</b>
	<b>90.03 SMA*</b>	11 pin	surface / DIN mount screw terminal socket		for modules	<b>43.00</b>
		* accepts plug-in LED, diode, timing modules ( <i>plug directly into sockets</i> ) (See pg 12)				
	<b>090.06</b>	6-way jumper link			for sockets 90.02/3	<b>27.00</b>
	<b>060.72</b>	sheet of snap-in identification tags (72)			for 60 series relays	<b>91.00</b>









## PCB mount / plug-in relays

	type	description	current		coil voltage	price
	<b>62 Series</b>	power relays	(47.6 x 38.2 x 36.mm)			
		<ul style="list-style-type: none"> <li>reinforced insulation between coil and contacts to EN60335-1</li> <li>plug-in or fast-on 187 (4.8 x 0.5mm) terminals</li> <li>lockable test button with mechanical flag indication</li> </ul>				
	<b>62.33.8012</b>	industrial power relays	16A	3 changeover	12VAC	77.00
	<b>62.33.8024</b>	industrial power relays	16A	3 changeover	24VAC	77.00
	<b>62.33.8048</b>	industrial power relays	16A	3 changeover	48VAC	84.00
	<b>62.33.8110</b>	industrial power relays	16A	3 changeover	110VAC	84.00
	<b>62.33.8230</b>	industrial power relays	16A	3 changeover	230VAC	81.00
	<b>62.33.8400</b>	industrial power relays	16A	3 changeover	400VAC	100.00
	<b>62.33.9012</b>	industrial power relays	16A	3 changeover	12VDC	77.00
	<b>62.33.9024</b>	industrial power relays	16A	3 changeover	24VDC	77.00
	<b>62.33.9048</b>	industrial power relays	16A	3 changeover	48VDC	84.00
	<b>62.33.9110</b>	industrial power relays	16A	3 changeover	110VDC	82.00
	<b>62.33.9220</b>	industrial power relays	16A	3 changeover	220VDC	117.00
	<i>Above relays available in 2-pole also with PCB termination.</i>					
	<b>Sockets and accessories</b> (supplied with retaining clip)					
	<b>92.13 SMA</b>	PCB mount socket				16.00
	<b>92.33 SMA</b>	flush mount socket solder terminal				16.00
	<b>92.03 SMA*</b>	surface / din rail mount socket screw terminal				60.00
	* accepts plug-in LED, diode, timing modules ( <i>plug directly into socket</i> ) (See pg 12)					
	<b>060.72</b>	sheet of snap-in identification tags (72)			for relays	91.00
	<b>65 series</b>	power relays	(42.2 x 32.2 x 36.5mm)			
		<ul style="list-style-type: none"> <li>flange mount fast-on 250 (6.3 x 0.8mm) terminals</li> <li>AC and DC coils</li> </ul>				
	<b>65.31.8.012</b>	heavy duty industrial relay	20A	1 changeover	12VAC	69.00
	<b>65.31.8.024</b>	heavy duty industrial relay	20A	1 changeover	24VAC	69.00
	<b>65.31.8.048</b>	heavy duty industrial relay	20A	1 changeover	48VAC	76.00
	<b>65.31.8.110</b>	heavy duty industrial relay	20A	1 changeover	110VAC	76.00
	<b>65.31.8.230</b>	heavy duty industrial relay	20A	1 changeover	230VAC	74.00
	<b>65.31.8.400</b>	heavy duty industrial relay	20A	1 changeover	400VAC	93.00
	<b>65.31.9.012</b>	heavy duty industrial relay	20A	1 changeover	12VDC	69.00
	<b>65.31.9.024</b>	heavy duty industrial relay	20A	1 changeover	24VDC	69.00
	<b>65.31.9.048</b>	heavy duty industrial relay	20A	1 changeover	48VDC	76.00
	<b>65.31.9.110</b>	heavy duty industrial relay	20A	1 changeover	110VDC	74.00
	<b>65.31.9.220</b>	heavy duty industrial relay	20A	1 changeover	220VDC	110.00
	<b>65.31.8.012.03</b>	heavy duty industrial relay	30A	1 x normally open	12VAC	67.00
	<b>65.31.8.024.03</b>	heavy duty industrial relay	30A	1 x normally open	24VAC	67.00
	<b>65.31.8.048.03</b>	heavy duty industrial relay	30A	1 x normally open	48VAC	74.00
	<b>65.31.8.110.03</b>	heavy duty industrial relay	30A	1 x normally open	110VAC	74.00
	<b>65.31.8.230.03</b>	heavy duty industrial relay	30A	1 x normally open	230VAC	72.00
	<b>65.31.8.400.03</b>	heavy duty industrial relay	30A	1 x normally open	400VAC	90.00
	<b>65.31.9.012.03</b>	heavy duty industrial relay	30A	1 x normally open	12VDC	67.00
	<b>65.31.9.024.03</b>	heavy duty industrial relay	30A	1 x normally open	24VDC	67.00
	<b>65.31.9.048.03</b>	heavy duty industrial relay	30A	1 x normally open	48VDC	74.00
	<b>65.31.9.110.03</b>	heavy duty industrial relay	30A	1 x normally open	110VDC	72.00
	<b>65.31.9.220.03</b>	heavy duty industrial relay	30A	1 x normally open	220VDC	108.00
	<b>66 series</b>	2-pole power relays	(31x 51.5 x 33.5mm)			
		<ul style="list-style-type: none"> <li>2-pole changeover 30A power relay</li> <li>reinforced insulation between coil and contacts to EN60335-1</li> <li>8mm creepage and clearance distance</li> <li>flange mount fast-on 250 (6.3 x 0.8mm) termination (DIN rail mount with accessory)</li> </ul>				
	<b>66.82.8.012</b>	high power industrial relay	30A	2 changeover	12VAC	83.00
	<b>66.82.8.024</b>	high power industrial relay	30A	2 changeover	24VAC	83.00
	<b>66.82.8.048</b>	high power industrial relay	30A	2 changeover	48VAC	83.00
	<b>66.82.8.110</b>	high power industrial relay	30A	2 changeover	110VAC	83.00
	<b>66.82.8.230</b>	high power industrial relay	30A	2 changeover	220VAC	88.00
	<b>66.82.9.012</b>	high power industrial relay	30A	2 changeover	12VDC	83.00
	<b>66.82.9.024</b>	high power industrial relay	30A	2 changeover	24VDC	83.00
	<b>66.82.9.110</b>	high power industrial relay	30A	2 changeover	110VDC	90.00
	<b>066.07</b>	top mount bracket for DIN 35mm rail mounting				12.00
	<i>Above relays available with PCB mount termination (replace 66.82_ with 66.22_)</i>					



## Modular relays / step relays / daylight switches

	type	description				price																																			
	<b>19 Series modular DIN rail mount</b> (84 x 11.2 x 57mm)																																								
	<b>19 Series - slimline (11.2mm wide) auto-off-on relay</b>																																								
	• LED indication - manual override switch																																								
	<b>19.21.0024</b>	slimline modular relay	10A	1 changeover	24V AC/DC	<b>225.00</b>																																			
	<b>019.40</b>	sheet of marker tags for above relay (40 x tags)				<b>41.00</b>																																			
	<b>20 Series modular step relays</b> (84 x 17.5 x 57mm)																																								
	<b>20 Series - modular (max. pulse duration 1 hour)</b>																																								
	• one module (17.5mm) wide																																								
	• AC and DC coils																																								
	• manual override / test button																																								
	• mechanical flag indicators																																								
					<table border="1"> <thead> <tr> <th>Type</th> <th>No of steps</th> <th colspan="4">Sequence</th> </tr> <tr> <th></th> <th></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>20.23</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>20.26</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>20.24</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>20.28</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Type	No of steps	Sequence						1	2	3	4	20.23	2					20.26	3					20.24	4					20.28	4				
Type	No of steps	Sequence																																							
		1	2	3	4																																				
20.23	2																																								
20.26	3																																								
20.24	4																																								
20.28	4																																								
<b>19.21</b>	<b>20.23.8012</b>	2 step modular step relay	16A	2 contact	12 VAC	<b>172.00</b>																																			
	<b>20.23.8024</b>	2 step modular step relay	16A	2 contact	24 VAC	<b>172.00</b>																																			
	<b>20.23.8110</b>	2 step modular step relay	16A	2 contact	110 VAC	<b>172.00</b>																																			
	<b>20.23.8230</b>	2 step modular step relay	16A	2 contact	230 VAC	<b>172.00</b>																																			
	<b>20.23.9012</b>	2 step modular step relay	16A	2 contact	12 VDC	<b>172.00</b>																																			
	<b>20.23.9024</b>	2 step modular step relay	16A	2 contact	24 VDC	<b>172.00</b>																																			
	<b>20.26.8012</b>	3 step modular step relay	16A	2 contact	12 VAC	<b>172.00</b>																																			
	<b>20.26.8024</b>	3 step modular step relay	16A	2 contact	24 VAC	<b>172.00</b>																																			
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	<b>20.26.9024</b>	3 step modular step relay	16A	2 contact	24 VDC	<b>172.00</b>																																			
<b>20.23</b>	<b>20.24.8012</b>	4 step modular step relay	16A	2 contact	12 VAC	<b>172.00</b>																																			
	<b>20.24.8024</b>	4 step modular step relay	16A	2 contact	24 VAC	<b>172.00</b>																																			
	<b>20.24.8110</b>	4 step modular step relay	16A	2 contact	110 VAC	<b>172.00</b>																																			
	<b>20.24.8230</b>	4 step modular step relay	16A	2 contact	230 VAC	<b>172.00</b>																																			
	<b>20.24.9012</b>	4 step modular step relay	16A	2 contact	12 VDC	<b>172.00</b>																																			
	<b>20.24.9024</b>	4 step modular step relay	16A	2 contact	24 VDC	<b>172.00</b>																																			
	<b>20.28.8012</b>	4 step modular step relay	16A	2 contact	12 VAC	<b>172.00</b>																																			
	<b>20.28.8024</b>	4 step modular step relay	16A	2 contact	24 VAC	<b>172.00</b>																																			
	<b>20.28.8110</b>	4 step modular step relay	16A	2 contact	110 VAC	<b>172.00</b>																																			
	<b>20.28.8230</b>	4 step modular step relay	16A	2 contact	230 VAC	<b>172.00</b>																																			
	<b>20.28.9012</b>	4 step modular step relay	16A	2 contact	12 VDC	<b>172.00</b>																																			
	<b>20.28.9024</b>	4 step modular step relay	16A	2 contact	24 VDC	<b>172.00</b>																																			
<b>26.03</b>	Standard voltages: 12 - 24 - 110 VAC/DC 230 VAC																																								
	<b>26 Series step relays (pulse "on", pulse "off")</b> (47 x 45 x 22mm)																																								
	<b>26 Series - base mount (max. pulse duration 1 hour)</b>																																								
	<b>2603.8012</b>	base mounting step relay	10A	1 NO + 1 NC	12 VAC	<b>82.00</b>																																			
	<b>2603.8024</b>	base mounting step relay	10A	1 NO + 1 NC	24 VAC	<b>82.00</b>																																			
	<b>2603.8110</b>	base mounting step relay	10A	1 NO + 1 NC	110 VAC	<b>82.00</b>																																			
	<b>2603.8230</b>	base mounting step relay	10A	1 NO + 1 NC	230 VAC	<b>82.00</b>																																			
	<b>0269.0.12</b>	module for operating 26 series relays	on DC	at	12 VDC	<b>62.00</b>																																			
	<b>0269.0.24</b>	module for operating 26 series relays	on DC	at	24 VDC	<b>62.00</b>																																			
	<b>10 Series daylight switches 230VAC</b> (110.6 x 58.6 x 40mm)																																								
	• adjustable sensitivity (1 to 80 Lux)																																								
	• built-in time delay (on 15 sec / off 30 sec)																																								
	• LED indication of relay status																																								
	• pole or wall mounting (brackets supplied)																																								
	<b>10.41.8230</b>	wall / pole mount daylight switch	IP54 16A	1 NO	230 VAC	<b>349.00</b>																																			
	<b>10.42.8230</b>	wall / pole mount daylight switch	IP54 16A	2 NO	230 VAC	<b>438.00</b>																																			
	<b>10.51.8230</b>	mini wall/pole mnt. daylight switch	IP54 12A	1 NO	230 VAC	<b>312.00</b>																																			
<b>10.51</b>	<b>11 Series modular daylight switches 230VAC</b> (84 x 17.5 x 57mm)																																								
	• adjustable sensitivity (1 to 100 Lux)																																								
	• built-in time delay (on 15 sec / off 30 sec)																																								
	• LED indication of relay status																																								
	• modular DIN rail mounting																																								
	• separate mounting of photo sensor																																								
	<b>11.71.8230</b>	modular rail mount daylight switch	16A	1 NO	230 VAC	<b>384.00</b>																																			
<b>11.71</b>																																									





## Plug-in LED / diode / timer modules

Plug-in modules are convenient add-on devices for relays, they offer LED indication (for easy viewing of relay state from a distance, diode protection, RC circuits, bypass and timing facilities for all socket mounted plug-in relays. The modules simply plug into specific sockets enhancing the relays functionality.

type	description	voltage	price
<b>Plug-in LED indication, EMC suppression and timer modules</b>			
<b>Diode module</b>			
Recovery diode modules are used for DC applications. The reverse voltage peaks of the coil are short circuited by the recovery diode. Release time is increased by an approximate factor of three.			
99.02.3000.00	diode module (standard polarity A1/+)	6-220VDC	14.00
<b>LED module</b>			
Used for AC and DC. The LED indicator illuminates when the relay coil is energised. It is essential to connect "+" to terminal A1 in DC applications.			
99.02.0.024.59	green LED module	6-24V AC/DC	21.00
99.02.0.060.59	green LED module	28-60V AC/DC	21.00
99.02.0.230.59	green LED module	110-240V AC/DC	21.00
<b>LED + diode module</b>			
Recovery diode module + LED are used for DC only reverse voltage peaks are short circuited by the recovery diode (positive to terminal A1). The LED illuminates when the relay is energised.			
99.02.9.024.99	green LED + diode module	6-24V AC/DC	24.00
99.02.9.060.99	green LED + diode module	28-60V AC/DC	24.00
99.02.9.220.99	green LED + diode module	110-220V AC/DC	24.00
<b>RC module</b>			
RC circuit modules are used for AC and DC applications. The reverse voltage peaks of the coil are limited by the RC module to approximately 2.5 times the nominal supply voltage. Insignificant increase in release time.			
99.02.0.024.09	RC module for AC / DC lines	6-24V AC/DC	30.00
99.02.0.060.09	RC module for AC / DC lines	28-60V AC/DC	30.00
99.02.0.230.09	RC module for AC / DC lines	110-240V AC/DC	30.00
<b>Residual current bypass module</b>			
Bypass modules are used in applications for 110 and 220V AC relays with a tendency to fail to release. Mainly caused by residual currents from AC proximity switches or inductive coupling caused by long parallel lying AC control lines.			
99.02.8.230.07	residual current bypass module	110-240V AC/DC	24.00
<b>Timer module</b>			
<ul style="list-style-type: none"> <li>• multi-function, multi-voltage timer module</li> <li>• time range 1s,10s,100s,10m,100m,10hr, 100hrs (adjustable)</li> <li>• plugs directly into sockets converting standard relays into timing devices</li> </ul>			
86.30.0.024	multi-range, bi-function, multi-voltage module	12-24V AC/DC	182.00
86.30.8.240	multi-range, bi-function, multi-voltage module	230V AC	204.00
86.00.0.240	multi-range, multi-function & voltage timer module	12-240V AC/DC	320.00



new

new

## Relay interface modules

	type	description						price	
 38.51  38.52  XX.51  43.04  43.04  34.08  40.04  40.04	<b>38 Series slimline interface modules (1-pole 6.2mm / 2-pole 14mm wide)</b>								
	<ul style="list-style-type: none"> <li>• sensitive DC coil or AC/DC versions</li> <li>• integral coil indication and circuit protection circuit</li> </ul>								
		<b>38.51.7.012</b>	1 pole	slimline relay interface	6A	1 CO	12	VDC	<b>96.00</b>
		<b>38.51.7.024</b>	1 pole	slimline relay interface	6A	1 CO	24	VDC	<b>96.00</b>
		<b>38.51.0.024</b>	1 pole	slimline relay interface	6A	1 CO	24	VAC/DC	<b>105.00</b>
		<b>38.51.0.240</b>	1 pole	slimline relay interface	6A	1 CO	230	VAC/DC	<b>126.00</b>
		<b>38.52.7.012</b>	2 pole	relay interface	8A	2 CO	12	VDC	<b>96.00</b>
		<b>38.52.7.024</b>	2 pole	relay interface	8A	2 CO	24	VDC	<b>96.00</b>
		<b>38.52.0.024</b>	2 pole	relay interface	8A	2 CO	24	VAC/DC	<b>105.00</b>
		<b>38.52.0.240</b>	2 pole	relay interface	8A	2 CO	230	VAC/DC	<b>126.00</b>
<b>Solid-state relay interfaces (1-pole 6.2mm / 2-pole 14mm wide)</b>									
	type	description		current	operating range	switching voltage		price	
	<b>38.81.7.024.9024</b>	solid state interface		2A	1NO	16-30VDC	1.5-24VDC	<b>195.00</b>	
	<b>38.81.7.024.8240</b>	solid state interface		2A	1NO	16-30VDC	12-240VAC	<b>203.00</b>	
	<b>38.31.7.024.9024</b>	solid state interface		5A	1NO	16-30VDC	1.5-35VDC	<b>241.00</b>	
	<b>38.31.7.024.8240</b>	solid state interface		3A	1NO	16-30VDC	12-275VAC	<b>235.00</b>	
<b>4304 Series relay interface 4-way (43 series relay 10A)</b>									
<ul style="list-style-type: none"> <li>• 4-way DIN rail (EN 50022) mounting relay interface module</li> <li>• compact (H) 90 x (W) 54 x (D) 30mm (with relays)</li> <li>• incorporates LED relay status indication and diode protected coils</li> <li>• negative common <i>positive (+) common on request</i></li> </ul>									
	<b>4304.9.012</b>	4 way	fixed relay interface	4 x 10A changeover		12	VDC	<b>140.00</b>	
	<b>4304.9.024</b>	4 way	fixed relay interface	4 x 10A changeover		24	VDC	<b>140.00</b>	
	<b>4304.9.000P</b>	4 way	plug-in version (DC relays to be ordered separately)					<b>62.00</b>	
<b>34 Series relay interface 8-way (34 series relay 6A)</b>									
<ul style="list-style-type: none"> <li>• 8-way DIN rail (EN 50022) mounting relay interface module</li> <li>• compact (H) 90 x (W) 54 x (D) 45mm (with relays)</li> <li>• incorporated LED relay status indication and diode protected coils</li> <li>• negative common <i>positive (+) common on request</i></li> </ul>									
	<b>3408.9.012</b>	8 way	fixed relay interface	6A	changeover	12	VDC	<b>352.00</b>	
	<b>3408.9.024</b>	8 way	fixed relay interface	6A	changeover	24	VDC	<b>352.00</b>	
<b>4004 Series relay interface 4-way (40 series relay 10A)</b>									
<ul style="list-style-type: none"> <li>• 4-way DIN rail (EN 50022) mounting relay interface module</li> <li>• (H) 76 x (W) 71 x (D) 55mm (with relays)</li> <li>• incorporates LED relay status indication / diode protected coils (on DC models only)</li> <li>• negative common <i>positive (+) common on request</i></li> </ul>									
	<b>4004.9.012</b>	4 way	relay interface module	10A	changeover	12	VDC	<b>195.00</b>	
	<b>4004.9.024</b>	4 way	relay interface module	10A	changeover	24	VDC	<b>195.00</b>	
	<b>4004.8.230</b>	4 way	relay interface module	10A	changeover	230	VAC	<b>295.00</b>	
	<b>4004.9.000P</b>	4 way	plug-in version (DC relays to be ordered separately)					<b>111.00</b>	
	<b>4004.8.000P</b>	4 way	plug-in version (AC relays to be ordered separately)					<b>117.00</b>	





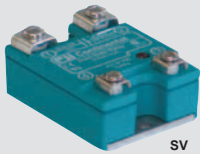
## Solid state relays

SV solid state relays incorporate Superior Surge Survival technology combined with a higher level of factory hardened toughness, generating significantly less heat. These relays lead the industry with new triple layer survivability.

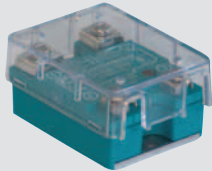
### SV Series

- LED status indicator
- transparent safety cover (included)
- optically isolated
- built-in snubber
- 4000V isolation
- high surge capability
- peak blocking voltage 800V (3V) 1200V (6V)
- zero voltage turn-on
- direct copper bonded SCRs
- EN60947 / UL / CSA

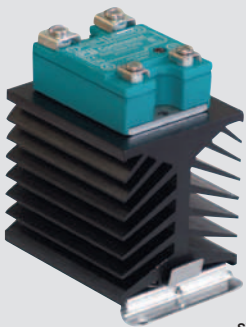
*\* adequate heatsinking including consideration of air temperature and flow is essential (see heatsinks below)*



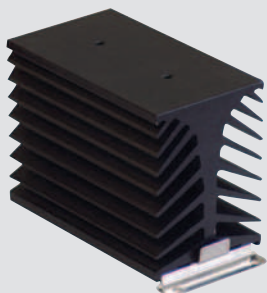
SV



SV



SV+HEATSK1.6



HEATSK1.0

type	control voltage	load current	operational voltage	description	price
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### DC control

<b>SVDA/3V10</b>	4-32 VDC	10A	24-330 VAC	solid state relay	<b>210.00</b>
<b>SVDA/3V25</b>	4-32 VDC	25A	24-330 VAC	solid state relay	<b>256.00</b>
<b>SVDA/3V50</b>	4-32 VDC	50A	24-330 VAC	solid state relay	<b>366.00</b>
<b>SVDA/3V75</b>	4-32 VDC	75A	24-330 VAC	solid state relay	<b>594.00</b>
<b>SVDA/6V50</b>	4-32 VDC	50A	24-660 VAC	solid state relay	<b>448.00</b>
<b>SVDA/6V75</b>	4-32 VDC	75A	24-660 VAC	solid state relay	<b>630.00</b>

### AC control

<b>SVAA/3V10</b>	100-280 VAC	10A	24-330 VAC	solid state relay	<b>289.00</b>
<b>SVAA/3V25</b>	100-280 VAC	25A	24-330 VAC	solid state relay	<b>295.00</b>
<b>SVAA/3V50</b>	100-280 VAC	50A	24-330 VAC	solid state relay	<b>416.00</b>
<b>SVAA/3V75</b>	100-280 VAC	75A	24-330 VAC	solid state relay	<b>630.00</b>
<b>SVAA/6V50</b>	100-280 VAC	50A	24-660 VAC	solid state relay	<b>610.00</b>
<b>SVAA/6V75</b>	100-280 VAC	75A	24-660 VAC	solid state relay	<b>760.00</b>

### DC-in, DC-out relays

<b>SVDD/1V12</b>	4-28 VDC	12A	0-100 VDC	solid state relay	<b>445.00</b>
<b>SVDD/1V20</b>	4-28 VDC	20A	0-100 VDC	solid state relay	<b>511.00</b>
<b>SVDD/1V40</b>	4-28 VDC	40A	0-100 VDC	solid state relay	<b>660.00</b>

### Heat sinks

The above current ratings are based on sufficient cooling provided for the relays

- DIN rail mountable / space saving design
- performance designed for maximum thermal efficiency

type	°C / watt	for relay	description	price
<b>HEATSK-DIN-1.6</b>	1.6°	10-40A	DIN rail mountable heatsink	<b>212.00</b>
<b>HEATSK-DIN-1.0</b>	1.0°	35-75A	DIN rail mountable heatsink	<b>289.00</b>

### Thermal transfer pads ( excellent replacement for thermal greases )

<b>THERMAL-PAD-005</b>	thermal transfer pads to mount between relay & heatsink (5 pcs)	<b>64.00</b>
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