

Mini

A2 Series

- Max inrush load 120A
- Ambient temperature -40°C +85°C
- Electrical life rate 100K cycles, typical
- Mechanical cycles 10,000,000
- Contact material AgSnO₂, IP rating IP54 DIN IEC 60 529

T9 Series

- Dust protected plastic case
- Meets UL 508 and 873 spacing
- UL class F insulation standard
- Max switching voltage 277 volt AC
- Mechanical endurance 10x10,000,000 ops
- Contact material AgCdO, 1 form A, 1 NO



A2 SERIES



T9 SERIES

Item Number	Volts	Amps	Contacts	Price
A2 Series				
A2F-24VDC	24	NO 20A, NC 10A, at 85°C	SPDT	\$19.55
A2F-12VDC	12	NO 40A, NC 20A , at 85°C	SPDT	\$16.00
T9 Series				
T9AP1D52-24	24	30	SPST	\$7.23

Heavy Duty

A3 Series

- Max inrush load 200 A lamp load / 150 A motor load
- Ambient temperature -40°C +125°C
- Electrical life rate 100K cycles, typical
- Mechanical cycles 10,000,000
- RoHS Compliant



A3 SERIES

Item Number	Volts	Amps	Contacts	Price
A3 Series				
Includes bracket and resistor				
A3F-12VDC	12	NO 50A	1 Form A / SPST N/O	\$20.00
A3F-24VDC	24	NO 60A	1 Form A / SPST N/O	\$46.67

Accessories



RELAY BASE



CONNECTOR

Item Number	Description	Price
87123	Mini 5 or 9 pin bracket mount, black	\$8.89
87269	Connector for Hella relay 87430 , blade size 9.5mm	\$0.72
87272	Connector for Hella relay 87123 , blade size 6.3mm	\$0.24

Images are representative of products listed and may not be actual product.

Relays and Timers

DAYTON + FINDER

40 AMP

- UL Listed
- CSA & CE Compliant
- Screw head terminals
- Minimum operating voltage for AC relays is 85% of nominal voltage
- Silver cadmium oxide contacts
- Self wiping contacts
- Molded thermoset plastic housing
- 40 amp@300 volt AC/28 volt DC contact rating (resistive)



30 AMP POWER

Item Number	Volts	Price
DPDT		
3X748	12VDC	\$62.88
3X749	24VDC	\$61.86
5X847	120VAC	\$62.46
5X848	240VAC	\$65.06

Step Relays

- 35 mm rail mount (EN 60715)
- 17.4 mm wide
- Choice of 6 switching sequences
- 1 or 2 contacts
- AC & DC coils



20 SERIES

Item Number	Volts	Price
20 Series		
16 Amp, Single phase switch 1 NO (SPST-NO)		
20.21.9.012	12VDC	\$42.97
20.21.9.024	24VDC	\$42.97
16 Amp, Double phase switch 2 NO (DPST-NO)		
20.22.9.012	12VDC	\$51.01
20.22.9.024	24VDC	\$51.01
20.22.8.120	120VAC	\$51.01

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Mini

- 5 mm pin pitch
- Use with 95 series sockets, 99 series suppression modules & 86 series timers
- Ambient temperature °C -40°C +85°C
- Meets EN 60335-1 glow wire requirements
- Coil indication and EMC suppression modules



40 SERIES

RELAY SOCKET

Item Number	Volts	Price
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40 Series

8A rated current 15A max peak current, 2 CO (DPDT)

40.52.9.012	12VDC	\$8.33
40.52.9.024	24VDC	\$8.33
40.52.8.024	24VAC	\$10.99
40.52.8.120	120VAC	\$13.61
40.52.8.230	240VAC	\$16.23

16A rated current 30A max peak current, 1 CO (SPDT)

40.61.9.012	12VDC	\$7.11
40.61.9.024	24VDC	\$7.11

Item Number	Description	Price
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Relay Socket

95.05	Screw terminal (Box clamp)	\$8.04
95.85.3	Screw terminal (Box clamp)	\$8.33

Hardware

095.91.3	Plastic Retaining Clip	\$0.54
095.01	Plastic Retaining Clip	\$0.54
095.71	Metal Retaining Clip	\$0.32
095.08	8 way Jumper for 95.85.3 Sockets	\$3.09
095.18	8 way Jumper for 95.05 Sockets	\$3.09

Relays and Timers

FINDER

General Purpose

- Use with 94 series sockets, 99 series suppression modules & 86 series timers
- 35 mm rail mount
- Lockable test button and mechanical flag indicator
- Ambient temperature °C -40°C +85°C
- AC or DC coils
- Socket mounted



55 SERIES



RELAY SOCKETS

Item Number	Volts	Price
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55 Series

7A rated current 15A max peak current, 4 CO (4PDT)

55.34.8.024	24VAC	\$16.08
55.34.9.012	12VDC	\$16.08
55.34.9.024	24VDC	\$16.08
55.34.8.120	120VAC	\$16.08
55.34.8.230	240VAC	\$18.85

10A rated current 20A max peak current, 2 CO (DPDT)

55.32.9.012	12VDC	\$15.15
55.32.9.024	24VDC	\$15.15
55.32.8.120	120VAC	\$15.15
55.32.8.230	240VAC	\$17.63

Item Number	Description	Price
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Relay Socket

94.04	Screw terminal (Box clamp)	\$8.80
94.74	Screw terminal (Plate clamp)	\$8.33

Hardware

094.91.3	Plastic Retaining Clip	\$0.54
094.71	Metal Retaining Clip	\$0.32
094.06	6 way Jumper for 94.04 Sockets	\$3.09

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General Purpose (Continued)

- Use with 90 series sockets, 99 series suppression modules & 86 series timers
- 8 & 11 pin plug-in
- AC & DC coils, including “current sensing” versions
- Available with lockable test button, mechanical flag & LED indicator
- Bifurcated contact option for low level switching



60 SERIES



RELAY SOCKET

Item Number	Volts	Price
60 Series		
10A rated current 20A max peak current, 2 CO (DPDT), 8 Pin		
60.12.9.012	12VDC	\$23.01
60.12.9.024	24VDC	\$23.01
60.12.8.024	24VAC	\$23.01
60.12.8.120	120VAC	\$23.01
60.12.8.230	230VAC	\$24.88
10A rated current 20A max peak current, 3 CO (3PDT), 11 Pin		
60.13.9.012	12VDC	\$23.80
60.13.9.024	24VDC	\$23.80
60.13.8.120	120VAC	\$23.80
60.13.8.230	230VAC	\$25.49
Item Number	Description	Price
Relay Socket		
90.26	Screw terminal (Box clamp), 8 Pin	\$7.90
90.27	Screw terminal (Box clamp), 11 Pin	\$8.94
90.02	Screw terminal (Box clamp), 8 Pin	\$9.41
90.03	Screw terminal (Box clamp), 11 Pin	\$10.52
Hardware		
090.06	6 way Jumper	\$4.16
090.33	Metal Retaining Clip	\$0.32

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Relays and Timers

FINDER

Power

- Magnetic blow
- Use with 92 series sockets, 99 series suppression modules & 86 series timers
- AC or DC coils
- NO contacts options, > 3mm contact gap
- LED, mechanical indicator & test button options



62 SERIES



RELAY SOCKET

Item Number	Volts	Price
62 Series		
16 Amp, 3PDT-CO		
62.33.9.012	12VDC	\$24.09
62.33.9.024	24VDC	\$24.09
62.33.8.120	120VAC	\$24.09
62.33.8.230	230VAC	\$25.81
Item Number	Description	Price
Relay Socket		
92.03	Screw terminal (Box clamp), 11 Pin	\$14.22

Suppression Modules

LED + Varistor

- LED modules + Varistor are used for both AC and DC coils
- The reverse voltage peaks of the relay coil are limited by the Varistor to approximately 2.5 times the nominal voltage of the supply
- When using DC coils it is essential that positive is connected to terminal A1. The relay release time increases insignificantly

LED + Diode

- Green LED + diode module (standard polarity)
- Recovery diode modules + LED are used for DC only
- The reverse voltage peaks of the coil are short circuited by the recovery diode (positive to terminal A1).
- The release time increases by an approximate factor from 3 to 5
- If an increase of the release time is undesirable use a Varistor or RC module.
- The LED indicator lights up when the coil is energized.



99 SERIES

item Number	Description	VAC/DC	Series Relay	Price
99 Series				
99.02.0.024.98	Green LED + Varistor	6-24	40, 55, 60, 62	\$6.50
99.02.0.230.98	Green LED + Varistor	110-230	40, 55, 60, 62	\$6.50
99.80.0.024.98	Green LED + Varistor	6-24	40, 55	\$6.50
99.80.0.230.98	Green LED + Varistor	110-230	40, 55	\$6.50
99.80.9.024.99	Green LED + Diode	6-24	40, 55	\$5.71

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Timers

80 Series

- Multi function & multi voltage timer
- Functions: AI (on delay), DI(interval), SW (symmetrical flasher, starting pulse on), BE (off delay with control signal), CE (on and off delay with control signal), DE (interval with control signal on)
- 17.5 mm wide
- Six time scales from 0.1s to 24h
- PWM clever technology for automatic recognition and regulation of the supply voltage

81 Series

- Multi function & multi voltage timer
- Functions: AI (on delay), DI (interval), SW (symmetrical flasher start pulse on), SP (symmetrical flasher start pulse off), BE (off delay with control signal), DE (interval with control signal on), EB (interval with control signal off)
- 17.5 mm wide
- Six time scales from 0.1s to 10h



TIMERS

Item Number	Contacts	Current	Volts	Price
80 Series				
80.01.0.240	SPDT	16A rated current 30A max peak current, 1 CO (SPDT)	12-240VAC/DC	\$82.73
81 Series				
81.01.0.230	SPDT	16A rated current 30A max peak current, 1 CO (SPDT)	12-230VAC/DC	\$106.06

83 Series

- Multi-function & multi-voltage
- 83.11 monofunction with ON-delay , multi-voltage
- 22.5 mm wide
- Multi Functions: AI (on delay), DI (interval), GI (pulse delayed), SW (symmetrical flasher start plus on), BE (off delay with control signal), CE (on and off delay with control signal), DE (interval with control signal on), WD (watchdog retriggerable interval with control signal on)
- Eight times scale from .05 second to 10 days
- High input/output isolation
- Wide supply range (24-240)volt AC/DC

86 Series

- Multi Functions: AI (on delay), DI (interval), SW (symmetrical flasher start plus on), BE (off delay with control signal), CE (on and off delay with control signal), DE (interval with control signal on), EE (Interval with control signal off and insert FE (Interval with control signal on and off)
- Seven time scales from 0.05s to 100h
- Plug-in for use with 90.02, 90.03, 92.03
- Wide supply range (12-240)volt AC/DC

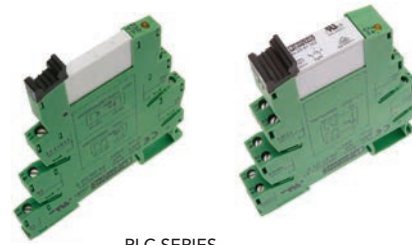
Item Number	Contacts	Current	Volts	Price
83 Series				
83.11.0.240	SPDT	16A rated current 30A max peak current, 1 CO (SPDT)	24-240VAC/DC	\$66.56
83.01.0.240	SPDT	16A rated current 30A max peak current, 1 CO (SPDT)	24-240VAC/DC	\$84.75
83.02.0.240	DPDT	12A rated current 30A max peak current, 2 CO (DPDT)	24-240VAC/DC	\$126.76
86 Series				
86.00.0.240	Use with 60 and 62 series relays		12-240VAC	\$69.33

Relays and Timers

PHOENIX RELAYS + PROTECTION

General Purpose

- Max inrush current 10 A (4 s)
- Max switching current 10 mA (at 12 V)
- Safe isolation DIN EN 50178, between coil and contact
- Inflammability class V0 (UL 94)
- Polyamide PBT, non-reinforced, color: green
- Efficient connection to system cabling using V8 adapter
- Screw and spring cage connection methods



PLC SERIES

Item Number	Contacts	Volts	Price
Relay with Base			
PLC-RSC-120UC21	SPDT	120 VAC	\$27.60
PLC-RSC-230UC/21	SPDT	230VAC	\$33.00
PLC-RSC-12DC/21	SPDT	12VDC	\$26.10
PLC-RSC-24DC/21	SPDT	24VDC	\$26.10
PLCRSC120UC2121	2PDT	120VAC	\$41.40
PLCRSC230UC2121	2PDT	230VAC	\$46.20
PLCRSC24DC/2121	2PDT	24VDC	\$34.20
Item Number	Contacts	Volts	Price
Relay Only			
REL-MR-24DC/21	SPDT	24VDC	\$18.00
RELMR24DC/2121	DPDT	24VDC	\$10.20
REL-MR-60DC/21	SPDT	60VDC	\$26.40
RELMR110DC/2121	DPDT	110VDC	\$15.00

AC Overcurrent relays provide monitoring and protection for three phase applications. Internal diagnostics annunciate when relay function or accuracy is compromised. The BE3-51 operates on only the fundamental component of the sensed current, rejecting all harmonic components. Set adjustment is based on a percentage of the relay's nominal sensing current rating. The delay adjustment prevents premature relay operation during brief current fluctuations.

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AC Voltage Band Monitor (120VAC)

- Designed to insure that the monitored operating voltage remains within a 120 volt AC band
- Dual op-amp comparator circuit to achieve stable and repeatable trip set points
- Output relay is energized only when the voltage being monitored remains between the upper and lower set points
- LED indicator lights signal over or under voltages and de-energize the relay
- Adjustment range: over voltage 120-140 volt AC, under voltage 90-110 volt AC
- Contact rating 10 amp at 240 volt AC resistive
- 8 pin mounting socket
- Dimensions in"(mm) 1.95(49.53)H x 1.95(49.53)W x 3.25(82.55)D
- Operating temp - 20° to +130° F



TIM268

Item Number	Volts AC	Contacts	Input Hz.	Price
TIM268	120	SPDT	45-420	\$156.40

AC Voltage Band Monitor (240VAC)

- The model 2681 Voltage Band Monitor is a dual set-point voltage monitor
- Under voltage range 200-240 volts AC
- Over voltage range 240-270 volt AC
- Input voltages between the upper and lower set points will cause the output contacts to pull in and the LED indicator to illuminate
- Input voltages above or below the set points will cause the output contacts to drop out and extinguish the LED indicator
- Automatic resets
- Dimensions in"(mm) 2.44(61.97)H x 1.75(44.45)W x 2.88(73.15)D
- Operating temp - 20° to +122°F



TIM2681-240V

Item Number	Volts AC	Contacts	Input Hz.	Price
TIM2681-240V	240	SPDT	50-400	\$192.00