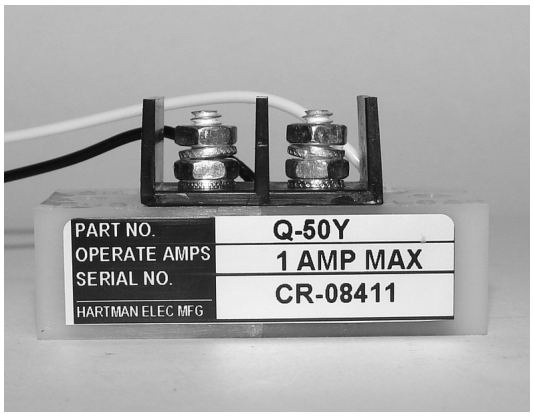
Q-50 Series Relay, Current Indicator, Rated up to 2 Amps, 28 Vdc

Product Facts

- **SPST NC**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement — SPST NC

Contact Rating @ 120 Vdc — 0.1 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 2 Amps, continuous

Pickup Max. — 1 Amp DC

Dropout Min. — 0.4 Amp

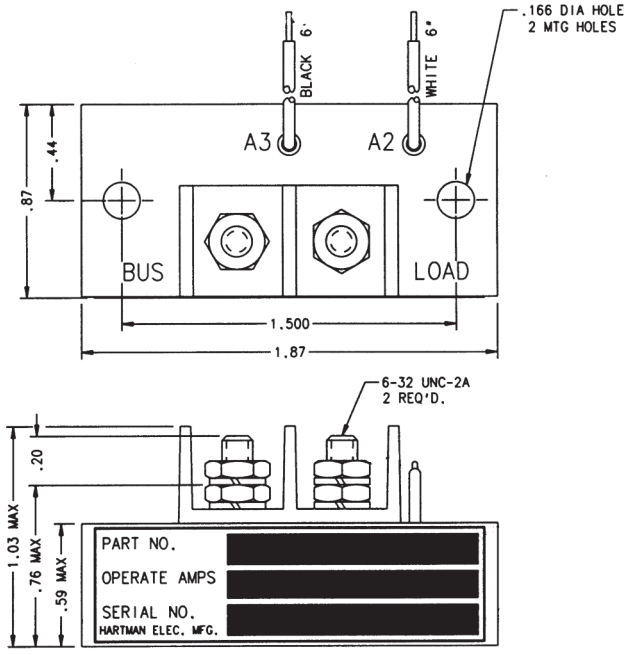
Operating Voltage, Nom. — 28 Vdc

General Characteristics

Temperature Range — -55°C to +71°C

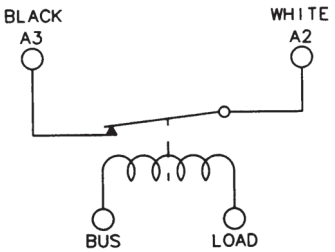
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz



Mounting Style A

Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50Y	Environmentally Sealed	A	Continuous	1	1-1616131-2

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

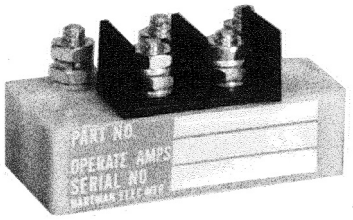
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 3.5 Amps, 28 Vdc

Product Facts

- **SPDT**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement — SPDT

Contact Rating @ 28 Vdc — 0.25 Amp

Lamp Load @ 28 Vdc — 0.080 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 3.5 Amps, continuous

Pickup Max. — 2 Amp DC

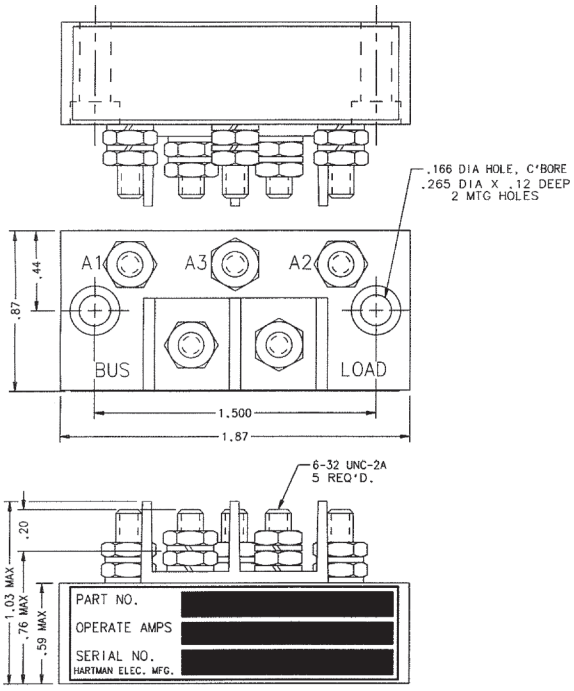
Dropout Min. — 0.8 Amp

General Characteristics

Temperature Range — -55°C to +71°C

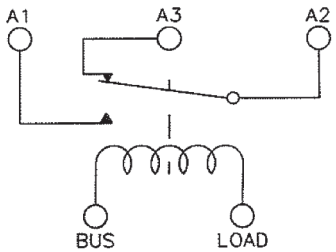
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz



Mounting Style A

Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50F	Environmentally Sealed	A	Continuous	1	1616131-9

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

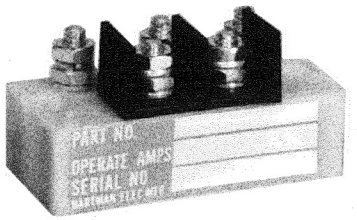
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 6.25 Amps, 28 Vdc

Product Facts

- **SPDT**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement — SPST NC

Contact Rating @ 28 Vdc — 0.25 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 6.25 Amps, continuous

Lamp Load — 0.080 Amp

Pickup Max. —
Q50BB – 2.5 Amps DC
Q50BD - 2.0 Amps DC
Q50E - 3.5 Amps DC

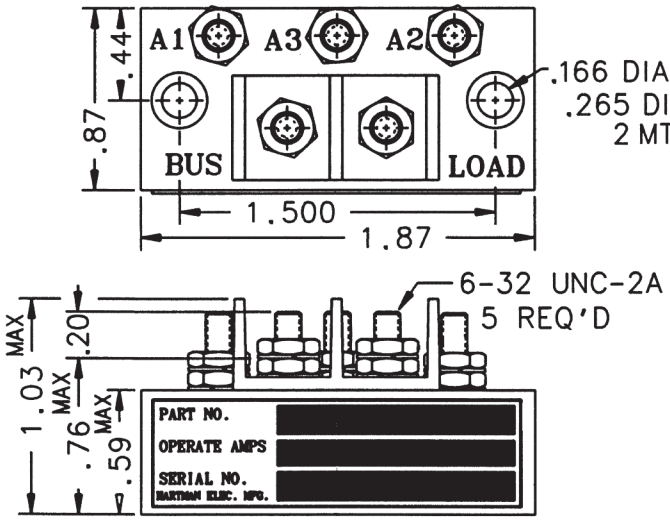
Dropout Min. —
Q50BD - 0.8 Amps DC
Q50BB - 1.0 Amps DC
Q50E - 1.4 Amps DC

General Characteristics

Temperature Range — -55°C to +71°C

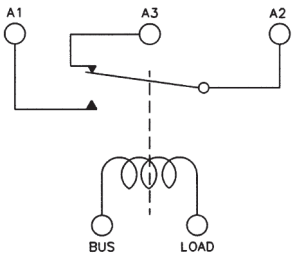
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz



Mounting Style A

Circuit Configurations
(Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
Q-50BB	Environmentally Sealed	A	Continuous	1	1616131-5
Q-50E	Environmentally Sealed	A	Continuous	1	1616131-8
Q-50BD	Environmentally Sealed	A	Continuous	1	1616131-6

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

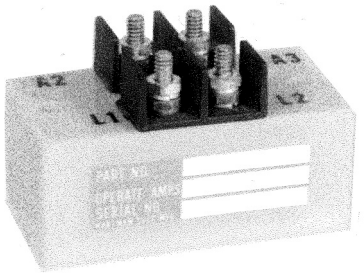
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 10 Amps, 28 Vdc

Product Facts

- **SPST NO**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement — SPST NO

Contact Rating @ 28 Vdc — 0.25 Amp

Lamp Load @ 28 Vdc — 0.08 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 20 Amps, continuous, max.

Pickup Max. — 3.5 Amps DC

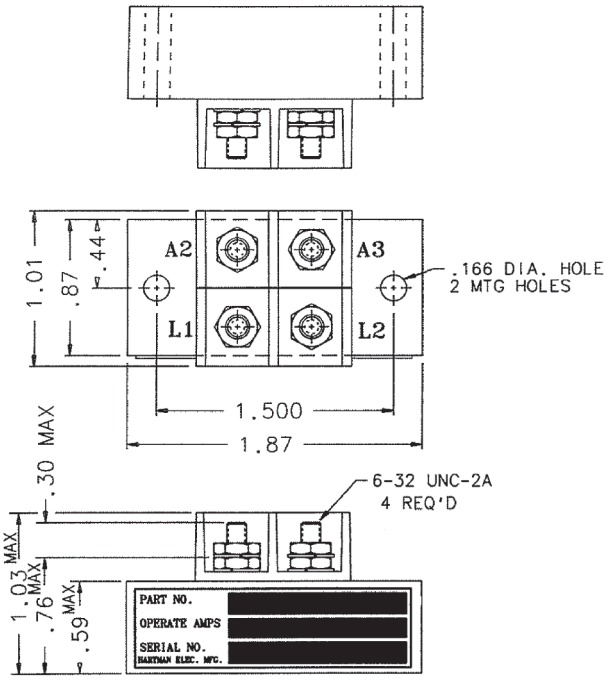
Dropout Min. — 0.5 Amp

General Characteristics

Temperature Range — -55°C to +71°C

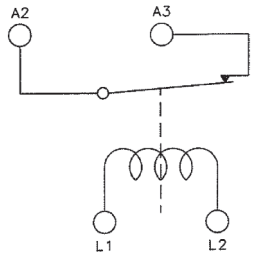
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz



Mounting Style A

Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50A	Environmentally Sealed	A	Continuous	1	1616131-1

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

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Dimensions are in millimeters unless otherwise specified.

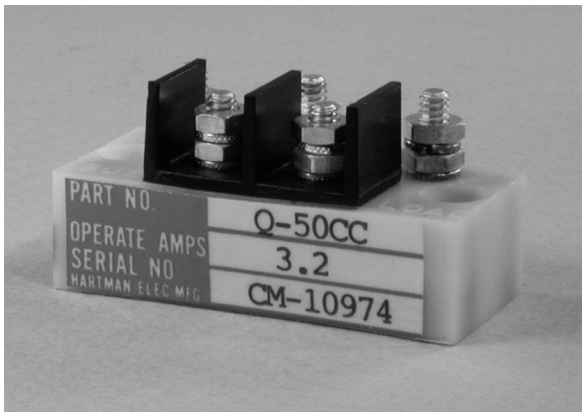
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 15 Amps, 28 Vdc

Product Facts

- **SPDT**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement — SPDT

Contact Rating @ 28 Vdc — 0.25 Amp

Lamp Load @ 28 Vdc — 0.10 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 15 Amps DC, continuous, max.

Pickup Max. — 3.2 Amps DC

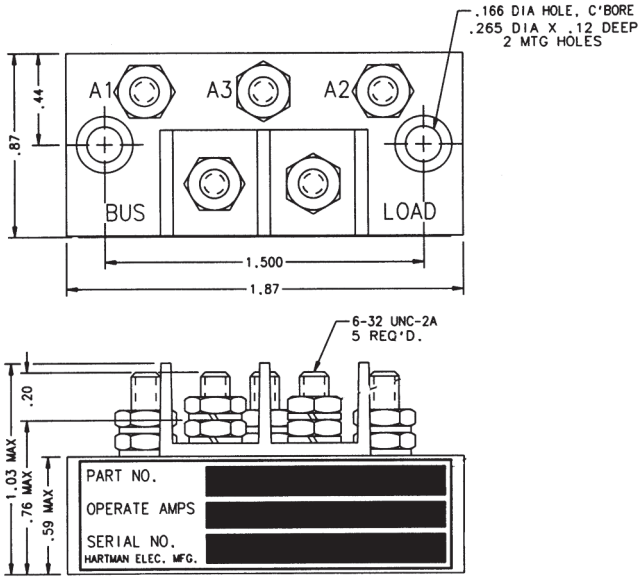
Dropout Min. — 1.2 Amps

General Characteristics

Temperature Range — -55°C to +85°C

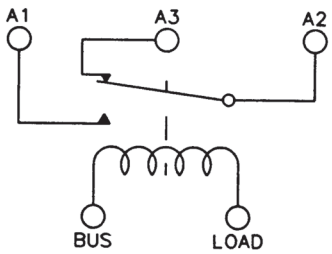
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz



Mounting Style A

Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50CC	Environmentally Sealed	A	Continuous	1	1616131-7

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

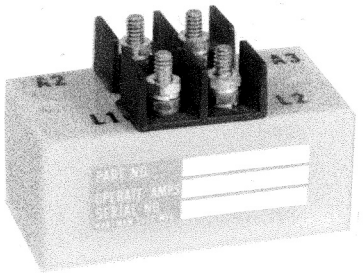
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

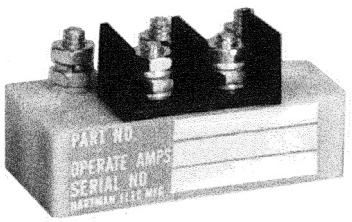
For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 16 Amps, 28 Vdc

Product Facts

- **SPST NC**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**





Performance Data

Electrical Characteristics

Contact Arrangement —
Q50S - SPST NC
Q50Z - SPDT

Contact Rating @ 28 Vdc —
0.25 Amp

Lamp Load @ 28 Vdc —
0.10 Amp

Rated Operating Voltage — 28 Vdc

Sensing Current Rating — 16 Amps
DC, continuous, max.

Pickup Max. — 3 Amps DC

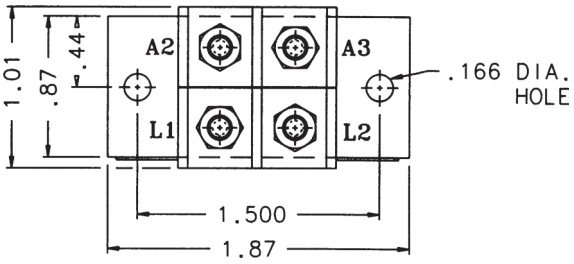
Dropout Min. — 1.2 Amps

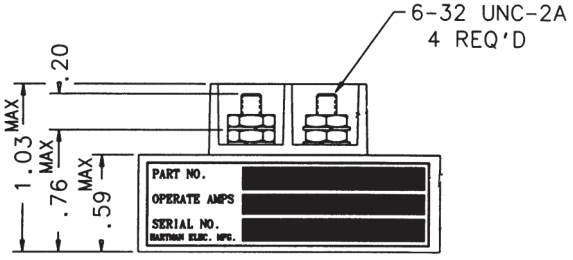
General Characteristics

Temperature Range —
-55°C to +71°C

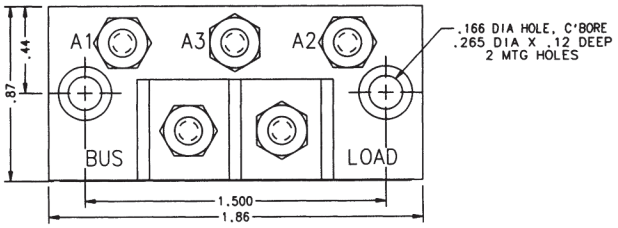
Altitude, Max. — 50,000 ft

Weight, Max. — 1.25 oz

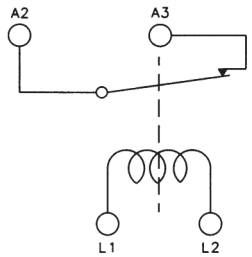




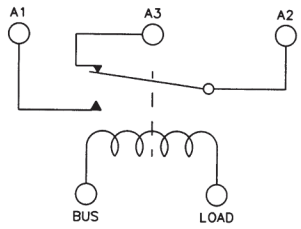
Mounting Style A



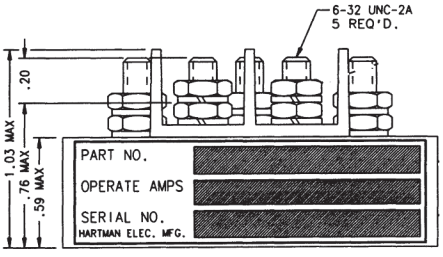
Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1



Circuit Configuration 1



Mounting Style B

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50S	Environmentally Sealed	A	Continuous	1	1-1616131-1
Q-50Z	Environmentally Sealed	A	Continuous	2	1-1616131-3

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

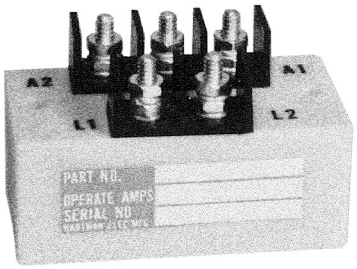
USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 20 Amps, 28 Vdc

Product Facts

- **SPST NC or SPST NO**
- **Environmentally sealed**
- **Meets many requirements of MIL-PRF-6106**



Performance Data

Electrical Characteristics

Contact Arrangement —
SPST NC, SPST NO or SPDT

Contact Rating @ 28 Vdc —
Q-50AB-2 — 0.2 Amp
Q-50J, — 0.25 Amp
Q-50AG — 1.0 Amp
Q-50AB-1 — 1 Amp switching, and 2 Amps carry
Q50AC — 2 Amp

Lamp Load @ 28 Vdc —
Q-50AC, Q-50AB-2 — 0.08 Amp
Q-50J, Q-50AG — 0.20 Amp

Operating Voltage, Nom. — 28 Vdc

Sensing Current Rating —
20 Amps continuous, max. except for Q-50AB-1 and Q-50AB-2 which are 10 Amps max. and 15 Amps max. for 3 sec.
Q50AC 2 Amps continuous 10 Amps max. for 5 seconds

Pickup Max. —
Q-50AC — 0.3 Amp
Q-50AB-1, Q-50AB-2 — 1.5 Amp
Q-50J — 3.5 Amps DC
Q-50AG — 6 Amps DC ± 20%

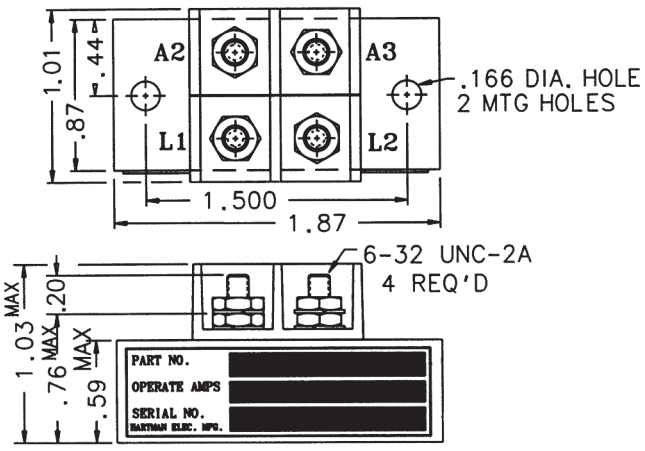
Dropout Min. —
Q-50AC — 0.1 Amp
Q-50J — 0.5 Amp
Q-50AB-1, Q-50AB-2 — less than 1 Amp
Q-50AG — 2.4 Amp

General Characteristics

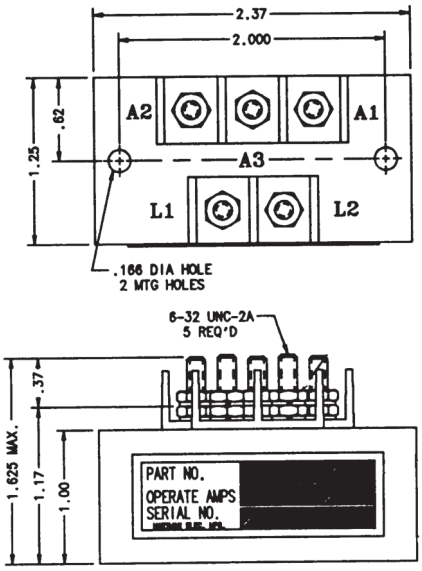
Temperature Range —
-55°C to +71°C

Altitude, Max. —
Q-50J, Q-50AB-1 — 50,000 ft
Q-50AC, Q-50AG, Q-50AB-2 — 60,000 ft

Weight, Max. — 1.25 oz



Mounting Style A



Mounting Style B

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

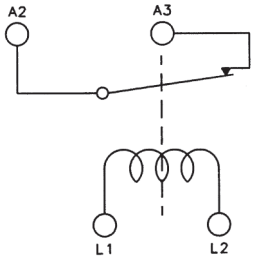
Dimensions are in millimeters unless otherwise specified.

USA: +1 800 522 6752
Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

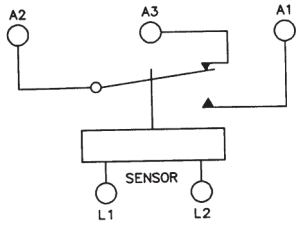
For additional support numbers please visit www.te.com

Q-50 Series Relay, Current Indicator, Rated up to 20 Amps, 28 Vdc (Continued)

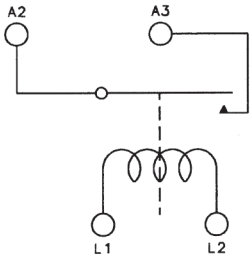
Circuit Configurations (Consult factory for other available circuit configurations)



Circuit Configuration 1



Circuit Configuration 2



Circuit Configuration 3

HARTMAN Part Number	Construction Type	Mounting Style	Duty Cycle	Circuit Config.	TE Part Number
Q-50J	Environmentally Sealed	A	Continuous	1	1-1616131-0
Q-50AC	Environmentally Sealed	B	Continuous	2	1616131-4
Q-50AG	Environmentally Sealed	A	Continuous	1	1616540-7
Q-50AB-1	Environmentally Sealed	A	Continuous	1	1616131-2
Q-50AB-2	Environmentally Sealed	A	Continuous	3	1616131-3

For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

Catalog 5-1773450-5
Revised 3-13

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change.

Dimensions are in millimeters unless otherwise specified.

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Asia Pacific: +86 0 400 820 6015
UK: +44 800 267 666

For additional support numbers please visit www.te.com