



2002-07-09

PRODUKTINFORMATION

Vi reserverar oss mot fel samt förbehåller oss rätten till ändringar utan föregående meddelande

ELFA artikelnr

37-006-14 Relä 100A 12Vdc

37-006-30 Relä 100A 24Vdc



PRESTOLITE SWITCH

JA 4600 Series DC Contactors
Coil Voltage 12 to 240
100 Ampere Rating
UL Approved



**A Comprehensive Range
of Compact Contactors
Designed to meet Market
Requirements**

AMETEK Prestolite Switch

Ipswich Road, Cardiff, CF23 9XP, United Kingdom

Telephone +44 (0)29 2049 6763

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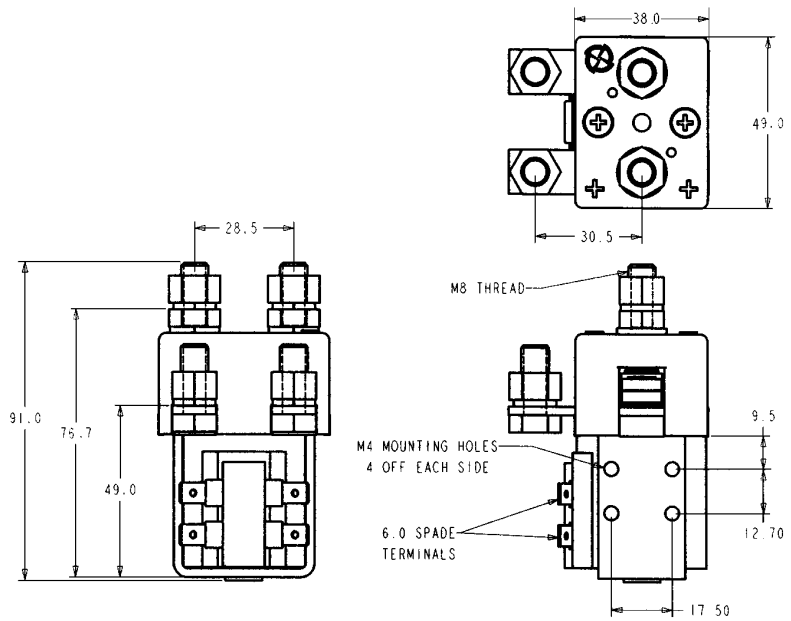


Certificate No. FM2258

Contactors in Series

- ***JAA** – Single Pole Single Throw
- ***JAB** – Single Pole Single Throw (Normally Closed)
- ***JAC** – Single Pole Double Throw
- ***JAD** – Double Pole Single Throw
- ***JAL** – 2 x JAA's On a Double Bracket
- ***JAM** – Paired Single Pole Double Throw on Bracket (For Motor Reversing)
- ***JAT** – 2 x JAC's On a Double Bracket
- ***JAV** – Paired Double Pole Single Throw on Bracket (For Motor Reversing)

Dimensional Details



JAA, JAB, JAC4600 Series

The contactors can be mounted either horizontally or vertically. If mounted vertically the contact studs must point upwards with the exception of the JAB and its derivatives which should be mounted with the contact studs pointing down.

Features

- ***Compact**
- ***Robust & Durable**

***UL Approved**

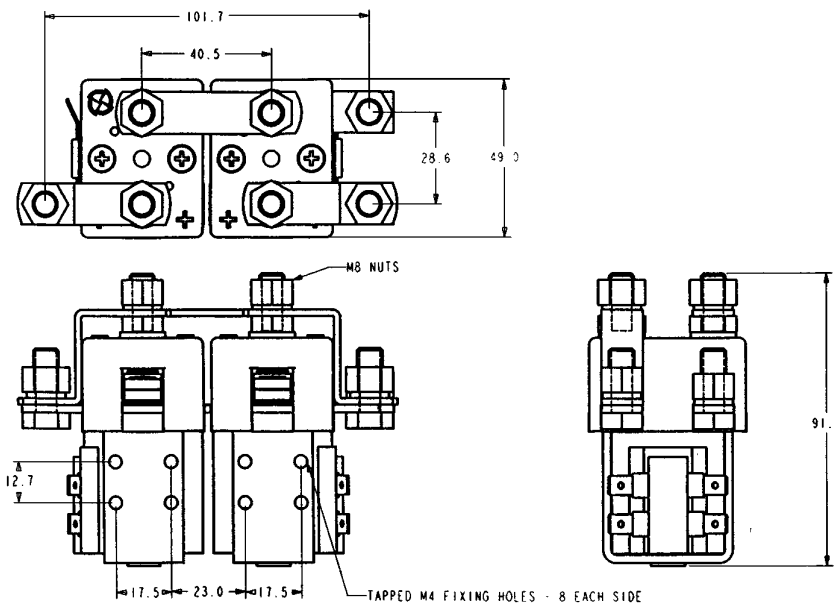
***Easy Servicing**

***Interchangeable with other leading brands**

Options

- ***Auxiliary micro switch**
- ***Magnetic Blow-outs**
- ***Coil surge protection**
- ***Contacts with large tips**
- ***Mounting brackets**
- ***Dust covers**

Dimensional Details



JAL, JAM, JAT4600 Series

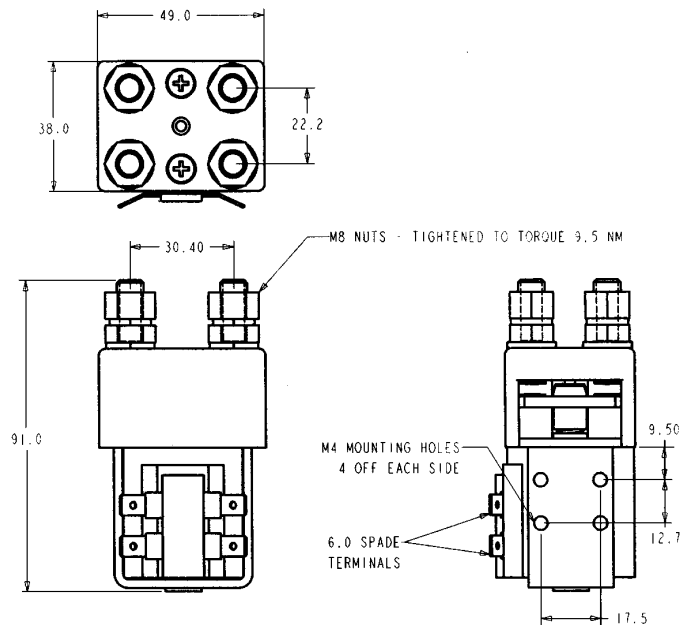


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Contactor Pairs

The contactors can be mounted in pairs on a bracket together with inter-connecting electrical links, of which the JAM & JAV contactors are designed for motor reversing. The JAM type has an inbuilt failsafe so that if both coils are energised together the contact design creates an open circuit. The JAV types are designed to have fast drop-out times (approx 5m.sec.) and slower pull-in times (approx 20m.sec.). This allows for motor direction changes to be undertaken without the risk of all contacts being closed at the same time. However certain types of coil suppression such as diodes substantially increase drop-out times and care must be taken to ensure suitable suppression is fitted, e.g., diode and resistor in series or varistor.

Contactors in Series



JAD4600 Series

The contactors can be mounted either horizontally or vertically. If mounted vertically the contact studs must point upwards

Magnetic Blowouts

The single pole types of contactor can be fitted with permanent magnetic blowouts. These allow the contacts to switch D.C. voltages higher than 48 D.V.C.

The fitting of blowouts makes the contacts polarity sensitive and the Positive marking on the top cover must be observed.

Auxiliary Contacts

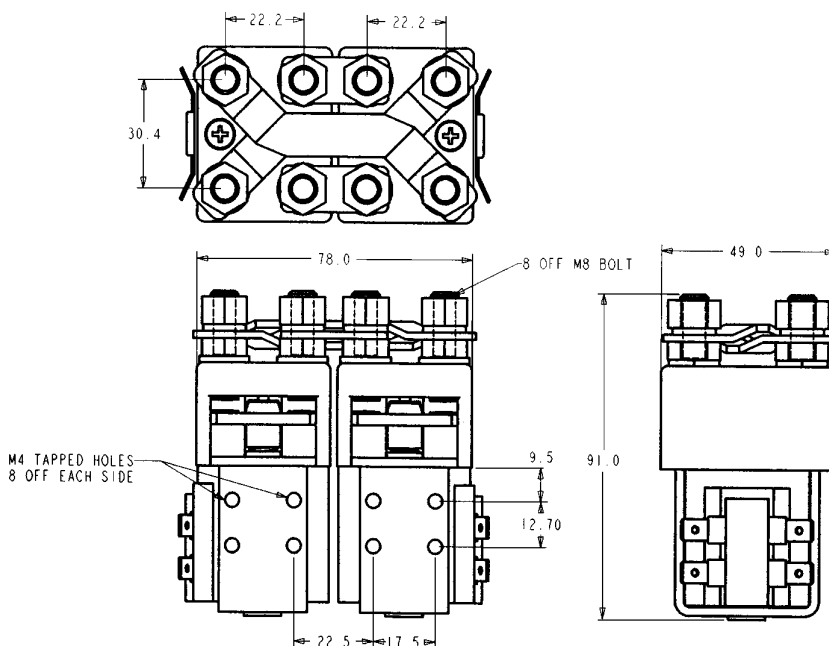
A double circuit normally open, normally closed microswitch can be fitted which has a D.C. resistive rating of 5 Amperes at 24V.

N.B. Auxiliary contacts cannot be fitted to the JAM & JAV types of contactors.

Large tips

For applications where severe conditions exist, e.g. pump motor switching, all types are available with larger tips. The suffix "L" denotes larger contact tips.

Dimensional Details



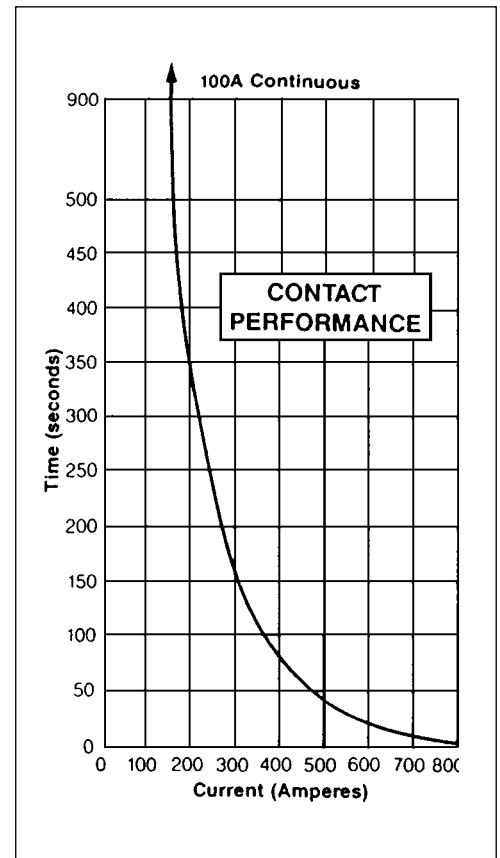
JAV4600 Series



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PERFORMANCE DATA

Thermal current rating (100%)	100 Amperes
Intermittent current rating	
30% duty	180 Amperes
40% duty	160 Amperes
50% duty	150 Amperes
60% duty	130 Amperes
70% duty	120 Amperes
Typical fault currents which can be ruptured (5ms time constant)	
JAA4600 & JAB4600	800 Amperes at 48V D.C.
JAA4670 & JAB4670	800 Amperes at 80V D.C.
JAC4600* & JAM4600*	800 Amperes at 48V D.C.
JAC4670* & JAM4670*	800 Amperes at 80V D.C.
JAD4600 & JAV4600	800 Amperes at 80V D.C.
<i>*Normally open contacts, not normally closed contacts.</i>	
Maximum recommended contact voltages	
JAA4600 & JAB4600	48V D.C.
JAA4670	96V D.C.
JAC4600 & JAM4600	48V D.C.
JAC4670 & JAM4670	96V D.C.
JAD4600 & JAV4600	96V D.C.
Typical voltage drop across contacts per 100 Amperes	
JAA4600 & JAB4600	<40mV
JAD4600 & JAV4600	<(per pole) 50mV
JAC4600 & JAM4600 (normally open contacts)	<40mV
JAC4600 & JAM4600 (normally closed contacts)	<50mV
Mechanical life	>5 x 10 ⁶
Coil power dissipation	
Intermittently rated types	15-20 Watts
Continuously rated types	7-14 Watts
Maximum pull-in voltage (coil at 20°C)	
Intermittently rated types	<60%V
Continuously rated types	<66%V
Typical drop-out voltage	10-20%V
Pull-in time (n/o contacts to close)	<20ms
Drop-out time (n/o contacts to open)	
Without suppression	<5ms
With diode suppression	<50ms
With diode and resistor (depending on value)	8-20ms
Main contact changeover time (JAC4600 & JAM4600)	
Normally closed to normally open	<7ms
Normally open to normally closed	<4ms
Typical contact bounce period	<3ms
Auxiliary contact thermal current rating	5 Amperes
Auxiliary contact switching capacities (resistive load)	5A at 24V D.C. 2A at 48V D.C. 0.5A at 240V D.C.



CONNECTION DIAGRAMS

