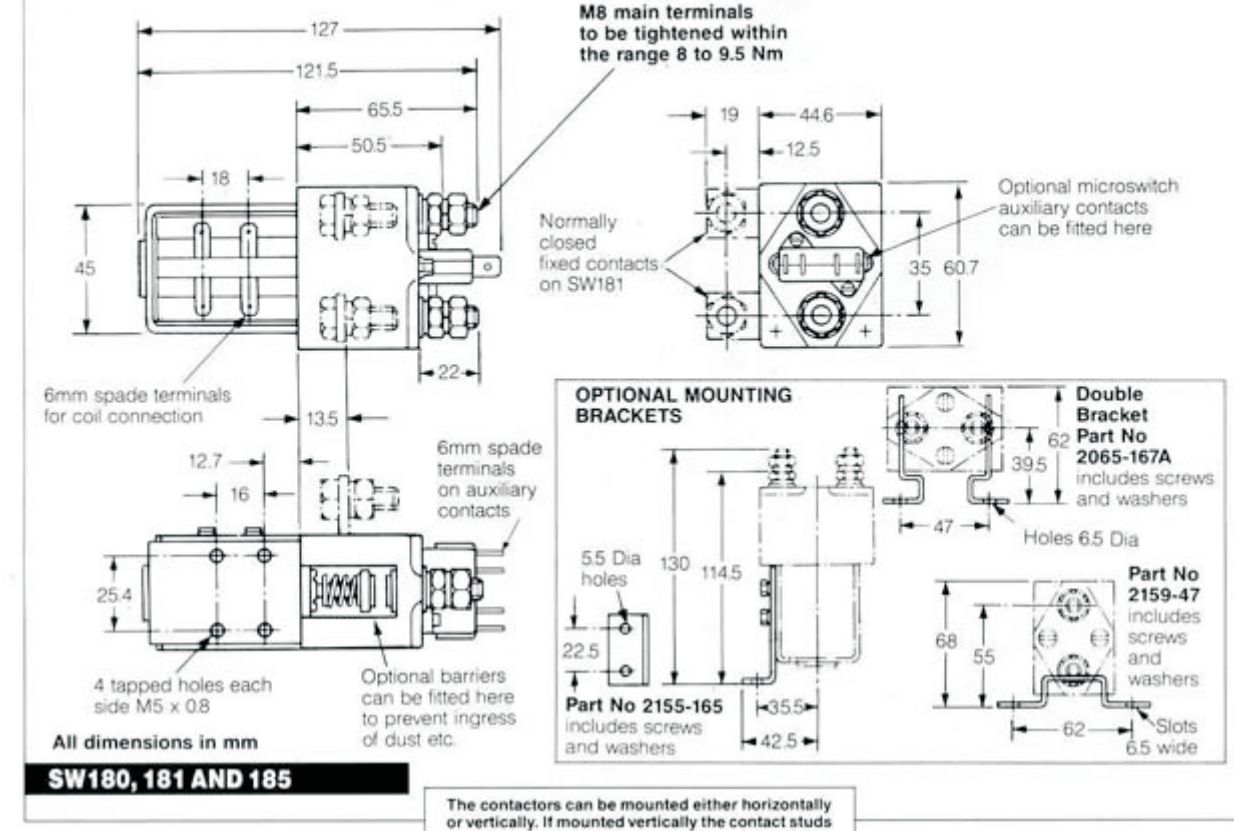
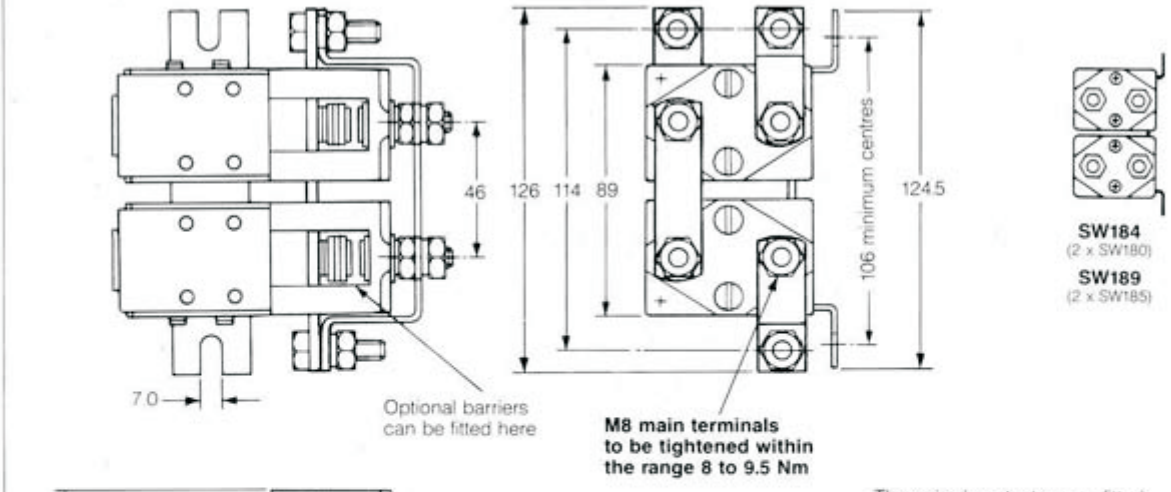
DIMENSION DRAWINGS



SW180, 181 AND 185

The contactors can be mounted either horizontally or vertically. If mounted vertically the contact studs must point upwards with the exception of the SW185 and its derivatives which should be mounted with the contact studs pointing downwards.



SW182, SW184 AND SW189

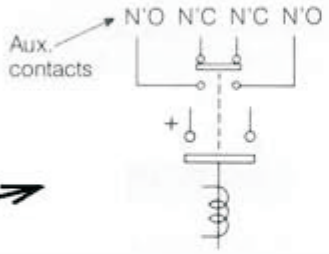
PLEASE NOTE

The Normally Closed contacts of the SW181 and SW182 are not designed to make and break current.

CONNECTION DIAGRAMS

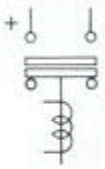
SW180

Single Pole Single Throw (On/Off) Contactor



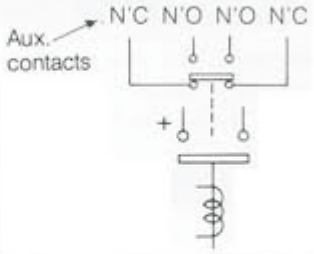
SW181

Single Pole Double Throw (Changeover) Contactor



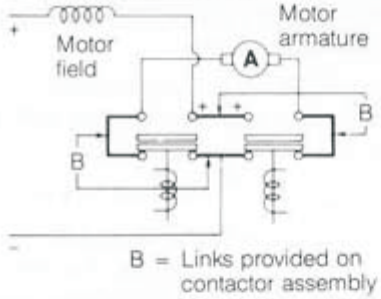
SW185

Single Pole Single Throw (Off/On) Normally Closed Contactor



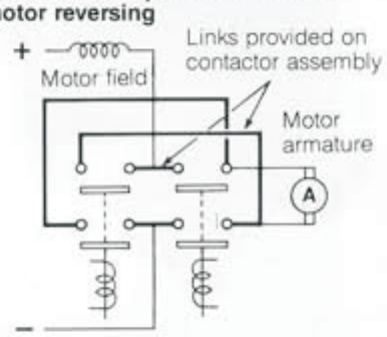
SW182

Paired Single Pole Double Throw Contactor. Complete with necessary links for motor reversing



SW192

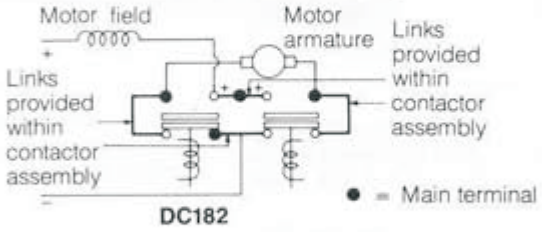
Paired Double Pole Single Throw Contactor complete with links for motor reversing



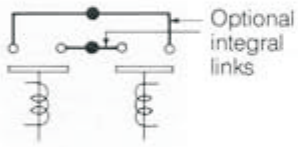
SW190

Double Pole Single Throw Contactor

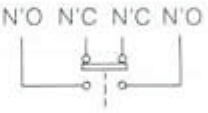
DC182 AND DC184



DC182



DC184



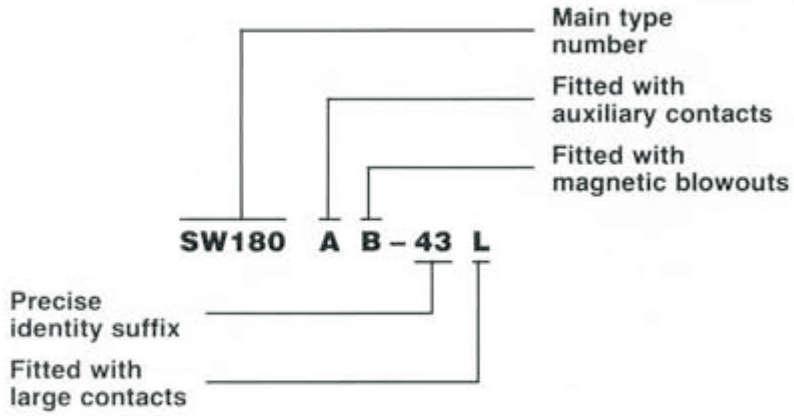
AUXILIARY CONTACTS

CONTACTOR WEIGHTS

Add 20 gms for each auxiliary *Add 50 gms for each set of blowout magnets.*

SW180	640 gms	SW182	1680 gms	SW185	655 gms	SW190	760 gms	DC182	1660 gms
SW181	780 gms	SW184	1350 gms	SW189	1380 gms	SW192	1660 gms	DC184	1450 gms

EXPLANATION OF CONTACTOR TYPE NUMBERS



	Auxiliary Contacts	Magnetic Blowouts	Mounting Brackets	Large Contact Tips	Closed Contact Housing
SW180	O	O	O	O	O
SW181	O	O	O	O	O
SW182	O	O	S	O	O
SW184	O	O	S	O	O
SW185	O	O	O	O	O
SW189	O	O	S	O	O
SW190	O	O	O	O	N
SW192	N	O	S	O	N
DC182	O	O	S	O	O
DC184	O	O	S	O	O

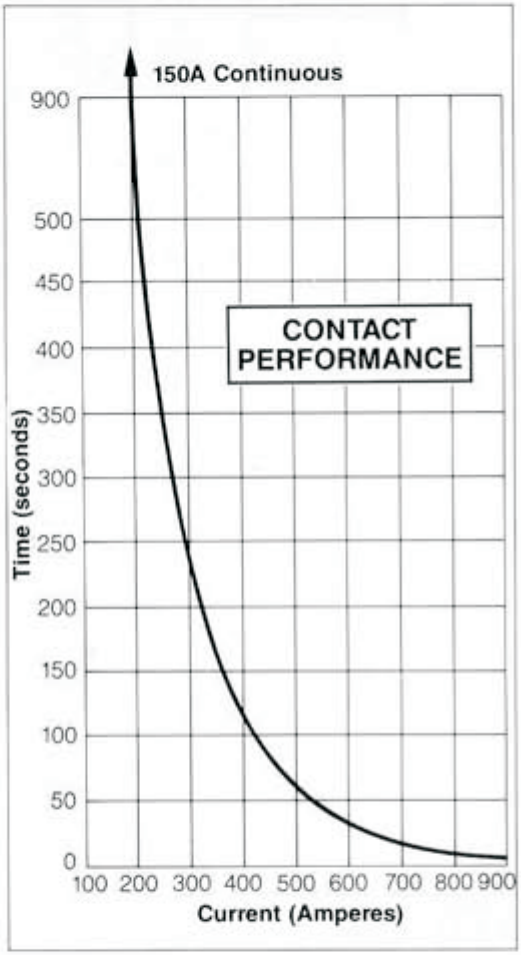
O = Optional Extra S = Standard Feature N = Not Available

COIL RESISTANCES FOR POPULAR VOLTAGES

	12V DC	24V DC	36V DC	48V DC	60V DC	72V DC	80V DC
Intermittently rated coils (ohms)	5	17	44	73	102	150	212
Continuously rated coils (ohms)	13	44	102	150	282	427	427

PERFORMANCE DATA

Thermal current rating (100%)	150 Amperes
Intermittent current rating	
30% duty	275 Amperes
40% duty	240 Amperes
50% duty	225 Amperes
60% duty	200 Amperes
70% duty	180 Amperes
Typical fault currents which can be ruptured (5ms time constant)	
SW180 and SW185	1000 Amperes at 48V D.C.
SW180B and SW185B	1000 Amperes at 96V D.C.
SW181*, SW182* and DC182*	1000 Amperes at 48V D.C.
SW181B*, SW182B* and DC182B*	1000 Amperes at 96V D.C.
SW190 and SW192	1000 Amperes at 80V D.C.
SW190B and SW192B	600 Amperes at 120V D.C.
** Normally open contacts, not normally closed contacts.*	
Maximum recommended contact voltages	
SW180 and SW185	48V D.C.
SW180B and SW185B	96V D.C.
SW181, SW182 and DC182	48V D.C.
SW181B, SW182B and DC182B	96V D.C.
SW190 and SW192	96V D.C.
SW190B and SW192B	120V D.C.
Typical voltage drop across contacts per 100 Amperes	
SW180 and SW185	30mV
SW190 and SW192 (per pole)	40mV
SW181, SW182 and DC182 (normally open contacts)	30mV
SW181, SW182 and DC182 (normally closed contacts)	40mV
Mechanical life	> 5 x 10^6
Coil power dissipation	
Intermittently rated types	30-40 Watts
Continuously rated types	10-15 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 approx (n/o contacts to close)	30ms
Drop-out time approx (n/o contacts to open)	
Without suppression	8ms
With diode suppression	60ms
With diode and resistor (depending on value)	25ms
Main contact changeover time (SW181, SW182 and DC182)	
Normally closed to normally open	12ms
Normally open to normally closed	5ms
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.



All the performance data figures should be used as a guide only. Alternative ratings may be considered according to applications.