

Schaltbau Machine Electrics Ltd.

AFS Series Contactor Data Sheets

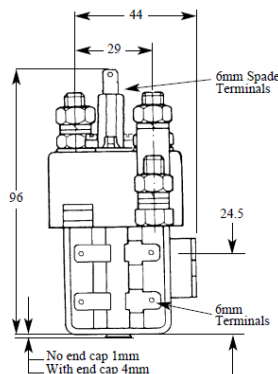
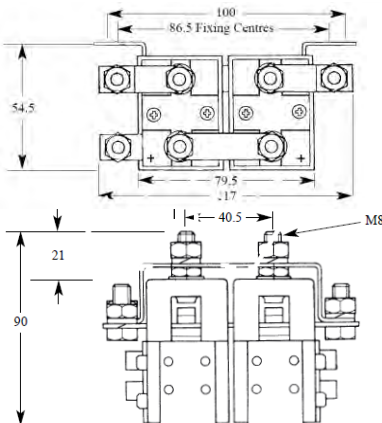
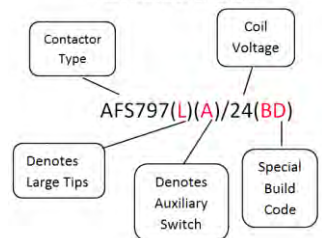


AFS797/80E
1-1603-328687
Us = 72/80V
T02 935718

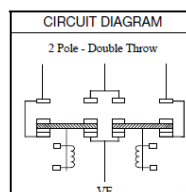


Note:
All of our Contactors have the above label type clearly identifying the Manufacturer and Model (example shown).

Part Number example:



Standard build is polarized as shown and includes linking strips and fixing brackets. Alternative details can be accommodated.

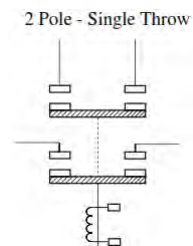
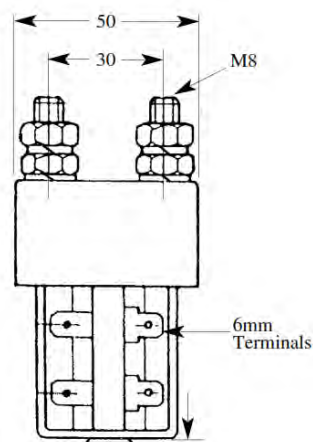
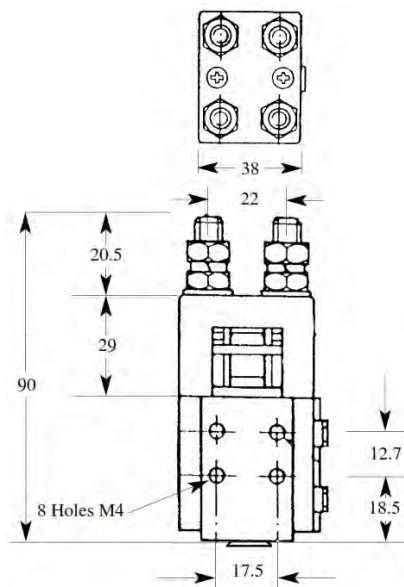


AFS	Kit	Article
19	A2046	1-2603-326544
19L	A2100/K2	1-2603-326852
15	A2069	1-2603-326657
15L	A2100/K3	1-2603-326860
11	A2070	1-2603-326658
11L	A2100/K4	1-2603-326862
17	A2100/K15	1-2603-326851
17L	A2100/K12	1-2603-326843
177	A2100/K18	1-2603-326849
177L	A2100/K16	1-2603-335589
899	A2048	1-2603-326547
819	A2103/1	1-2603-326865
819L	A2103/4	1-2603-326877
818	A2103/2	1-2603-326870
818L	A2103/5	1-2603-326880
817	A2103/3	1-2603-333027
817L	A2103/6	1-2603-326881
814	A2139/01	1-2603-327118
814L	A2139/02	1-2603-327124
809	A2117/7	1-2603-327091
809L	A2117/8	1-2603-327086
807	A2117/9	1-2603-327089
807L	A2117/11	1-2603-327063
799	A2040	1-2603-326529
798	A2068	1-2603-326649
797	A2045	1-2603-326545
789	A2141/01	1-2603-327121
784	A2141/01	1-2603-327121
717	A2111	1-2603-326977
717L	A2115/03	1-2603-335314
711	A2110	1-2603-326966
711L	A2114/01	1-2603-327027

AFS17 100A Double Pole Single Throw Contactor N/O

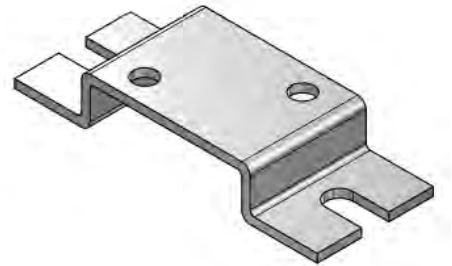
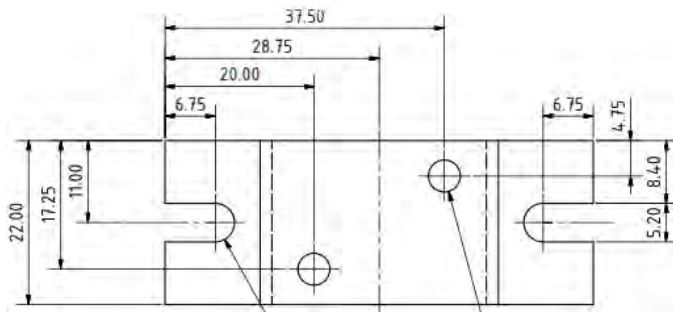
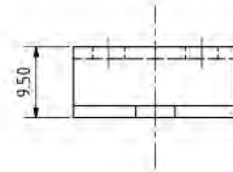
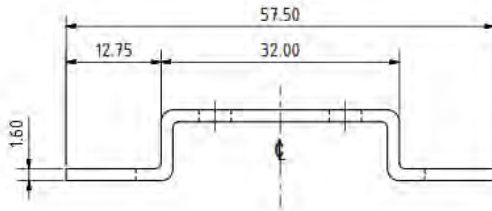


Main Technical Data	AFS17
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x DPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75.....2.5) mm ²
Load wire stranded awg	4 awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}C$	10W to 18W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	430g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

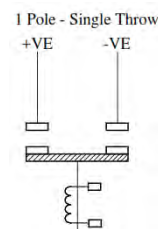
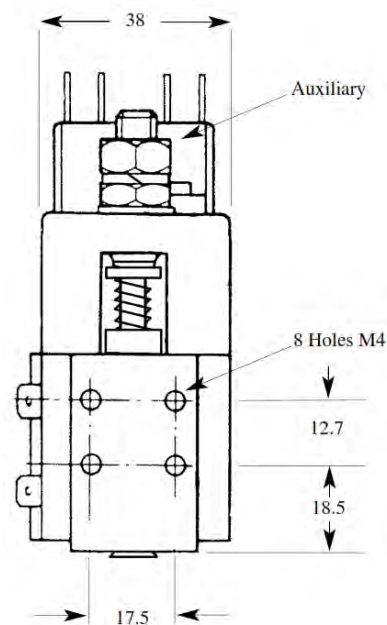
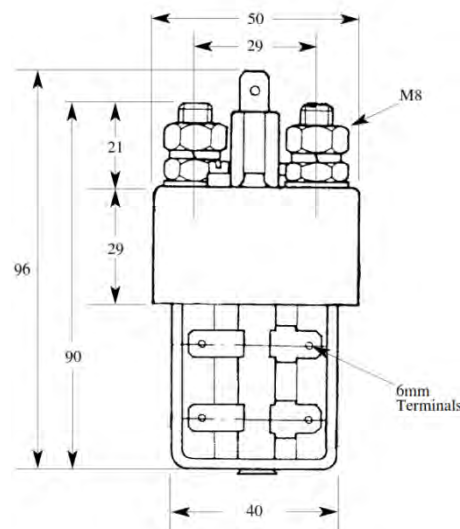
Bracket Kit 1-3603-327208



AFS14 100A Single Pole Single Throw Normally Closed

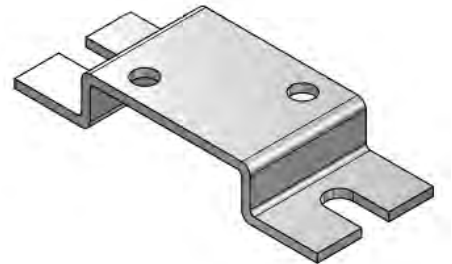
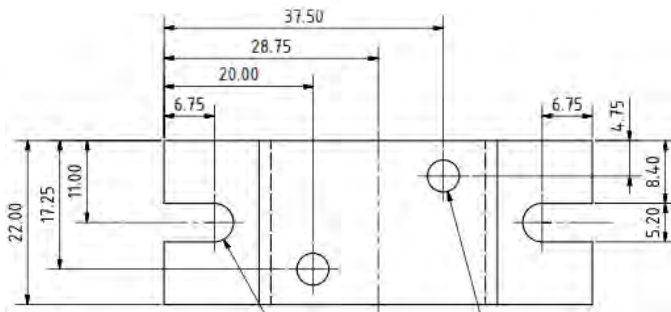
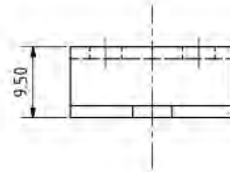
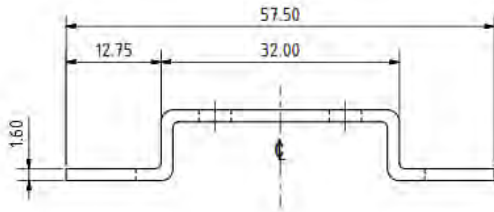


Main Technical Data	AFS19
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NC
Nominal voltage U _n	48 V (80 V)
Rated operating voltage U _e	48 V (80 V)
Rated insulation voltage U _{Nm} (U _i)	80 V (150 V)
Rated impulse withstand voltage U _{Ni} (U _{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I _{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I _{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U _{sn}	6V to 240V DC
Operating range of U _s	0.7x U _{sn} ... 1.10x U _{sn}
Coil Tolerance (use of letter E)	-30%...+10% U _s
Coil Power consumption at U _n and Ta=20°C	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	380g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

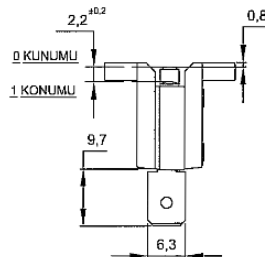
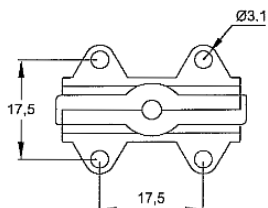
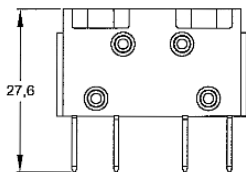
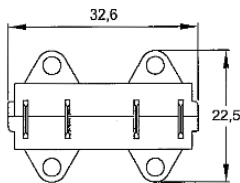


**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

Bracket Kit 1-3603-327208



Auxiliary Switch Option



Specifications

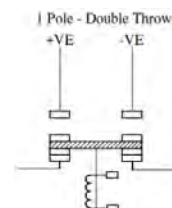
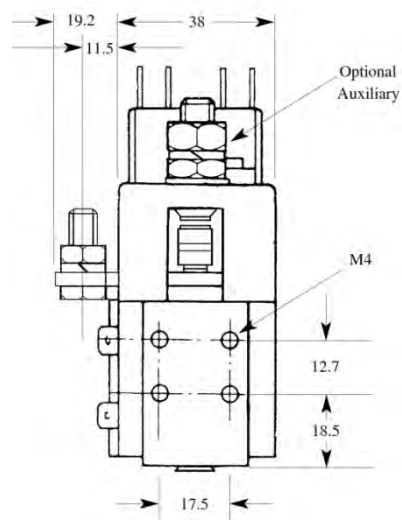
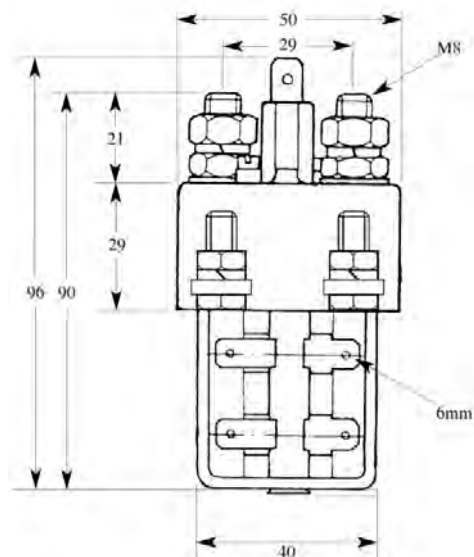
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS15 100A Single Pole double Throw Contactor



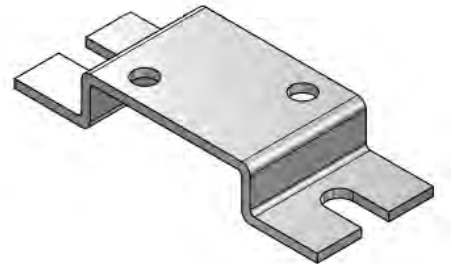
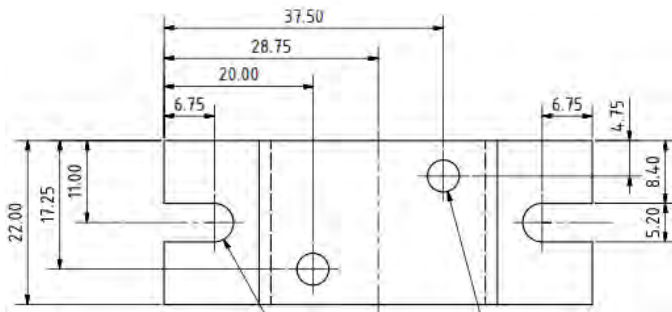
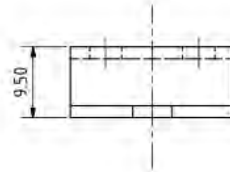
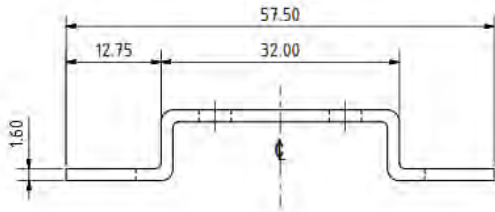
Main Technical Data	AFS15
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75.....2.5) mm ²
Load wire stranded awg	4 awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	10W to 18W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	460g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

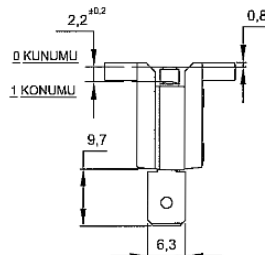
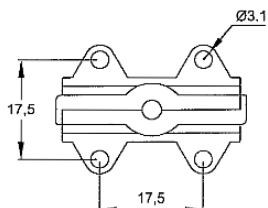
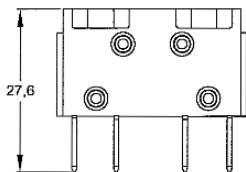
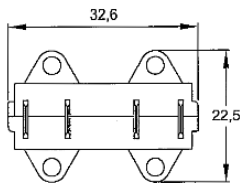
Please note Normally Closed contacts are not suited to make and break load.

Bracket Kit 1-3603-327208



©

Auxiliary Switch Option



Specifications

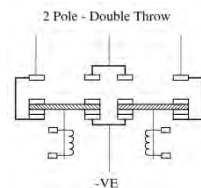
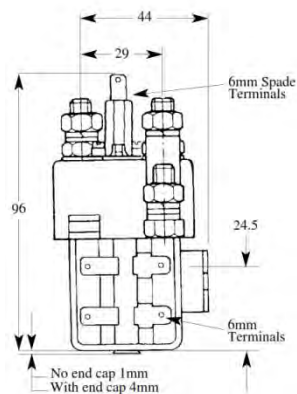
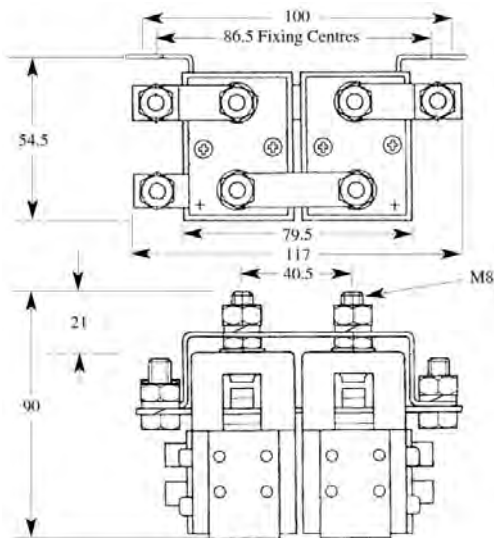
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS11 100A Double Pole Double Throw

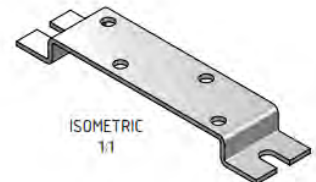
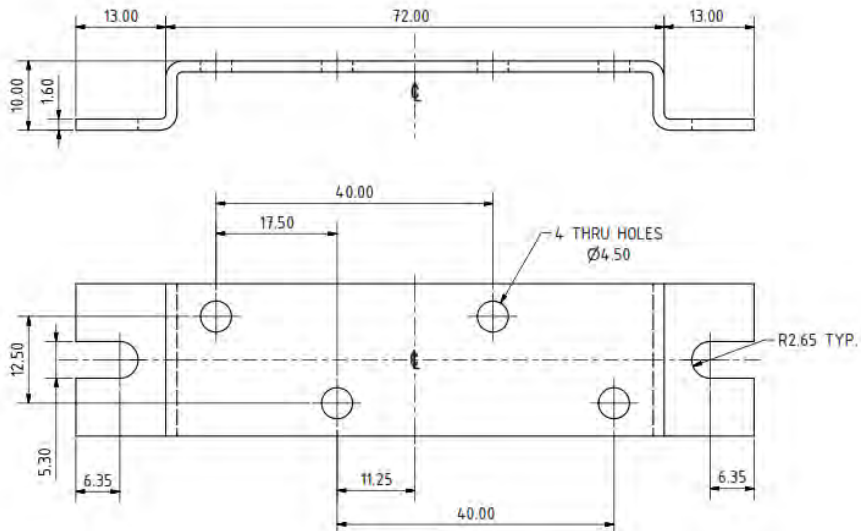


Main Technical Data	AFS11
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	DPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	970g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

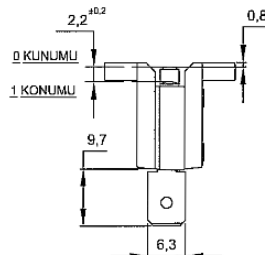
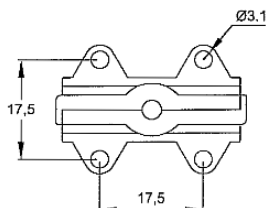
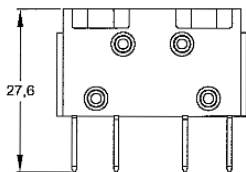
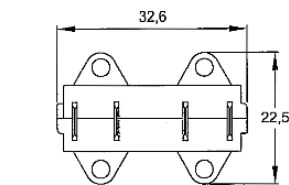


**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

Bracket Details



Auxiliary Switch Option



Specifications

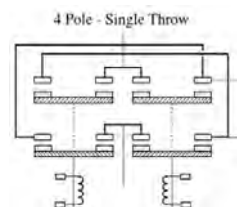
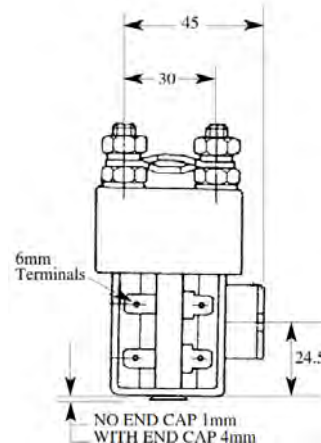
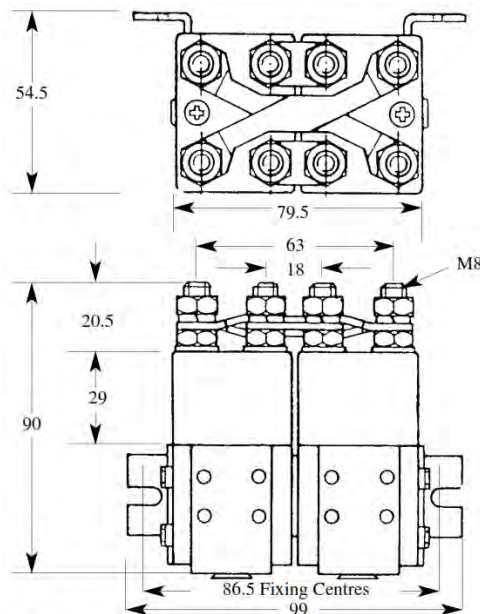
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00 Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS177 100A 2 x Double Pole Single Throw



Main Technical Data	AFS177
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	2 X DPST
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	960g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

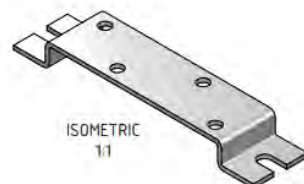
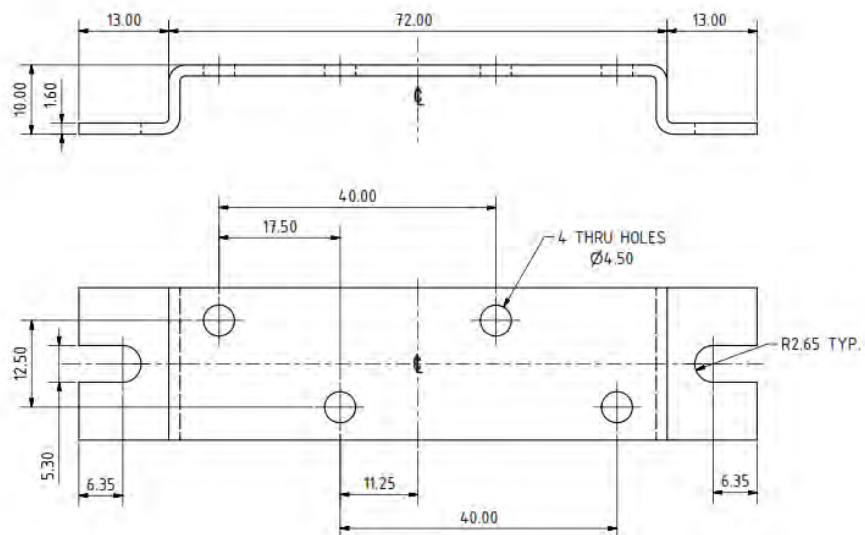


**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

SCHALTBAU

Connect Contact Control

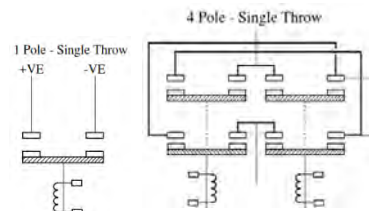
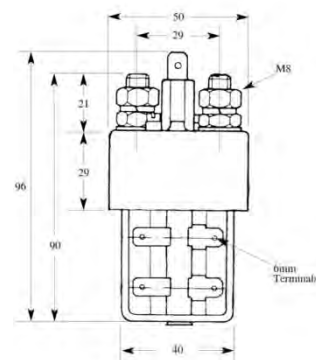
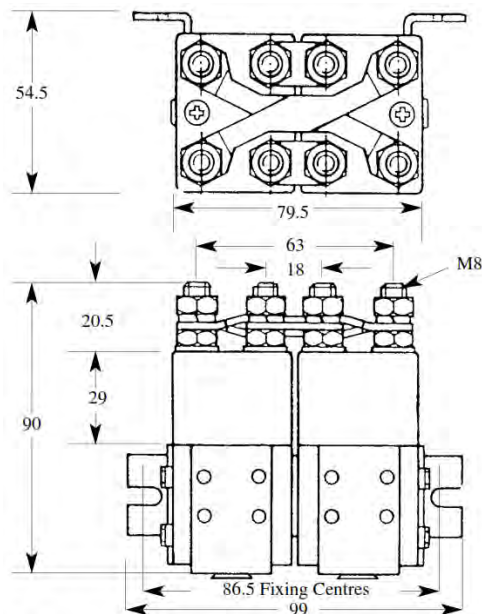
Bracket Details



AFS176L 100A 2 x Double Pole Single Throw + 1 x Single Pole Single Throw



Main Technical Data	AFS176L
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	2 X DPST + 1 x SPST
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1400g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

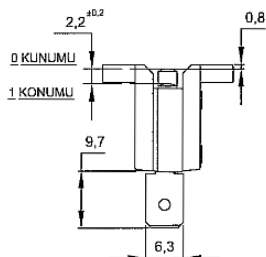
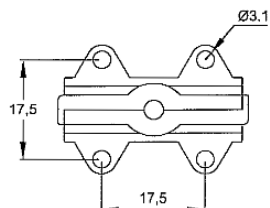
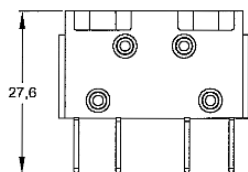
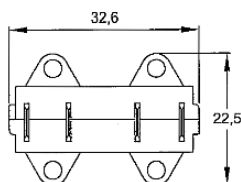


**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

Bracket A3150/B16



**Auxiliary Switch Option
Only on AFS19 contactor**



Specifications

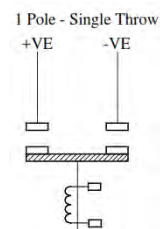
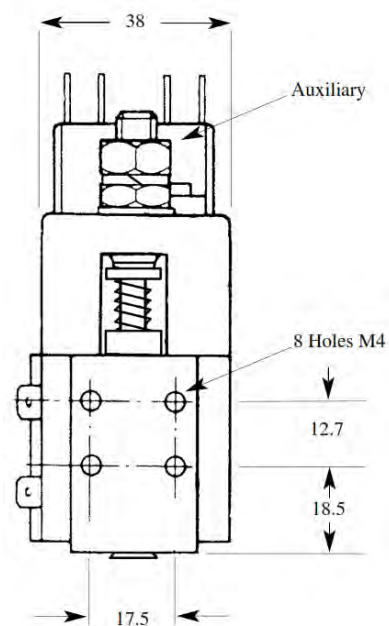
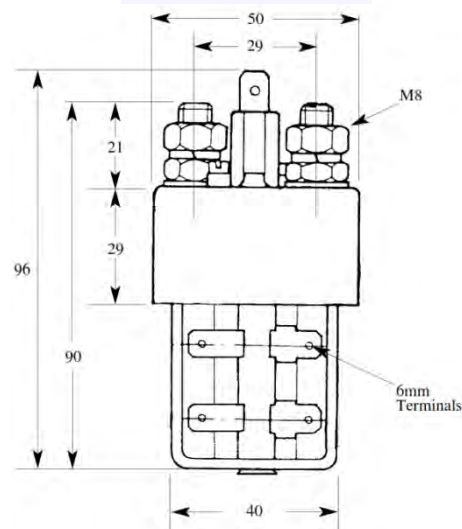
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS19 100A Single Pole Single Throw Normally Open

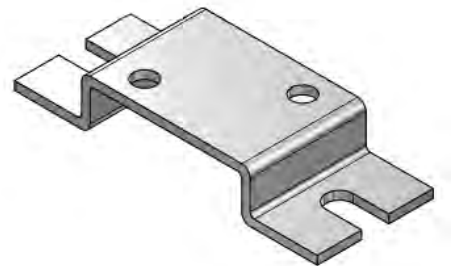
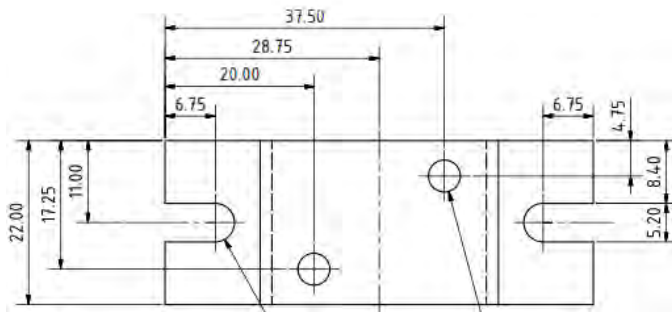
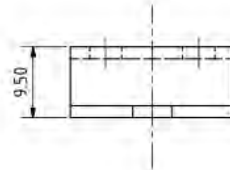
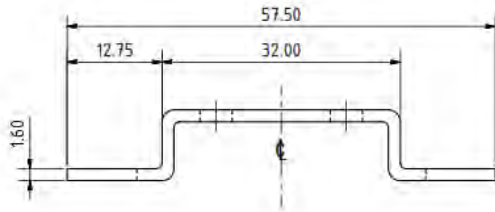


Main Technical Data	AFS19
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	430g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



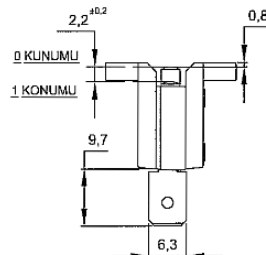
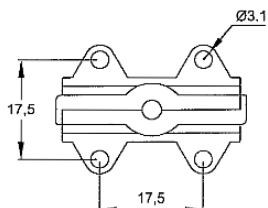
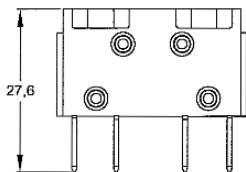
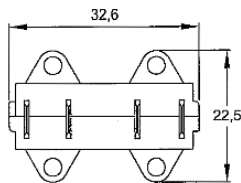
**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

Bracket Kit 1-3603-327208



©

Auxiliary Switch Option



Specifications

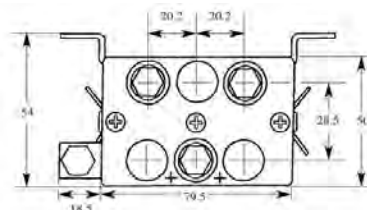
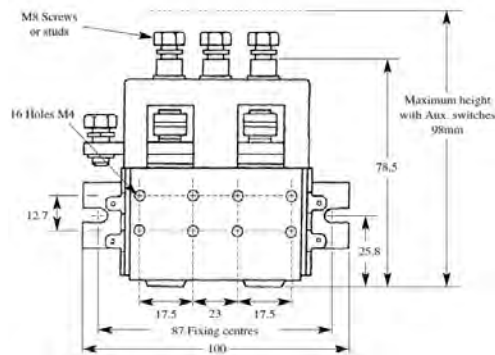
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

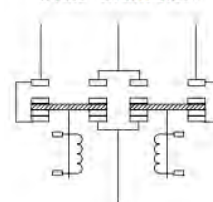
AFS711 100A Double Pole Double Throw



Main Technical Data	AFS711
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x DPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	100A < 60V DC, 80A @ 80V DC
Short time Overload Capacity	150A 8mins 30s, 200A 2 mins 2s, 300A 29s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	185A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4awg (25mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	10W to 19W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M4 Screws, brackets
Arc Chute minimum clearance distance	60mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1650g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



2 Pole - Double Throw



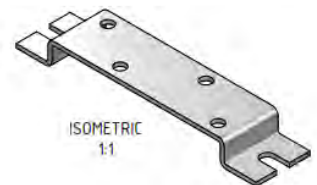
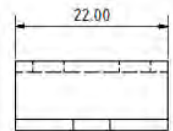
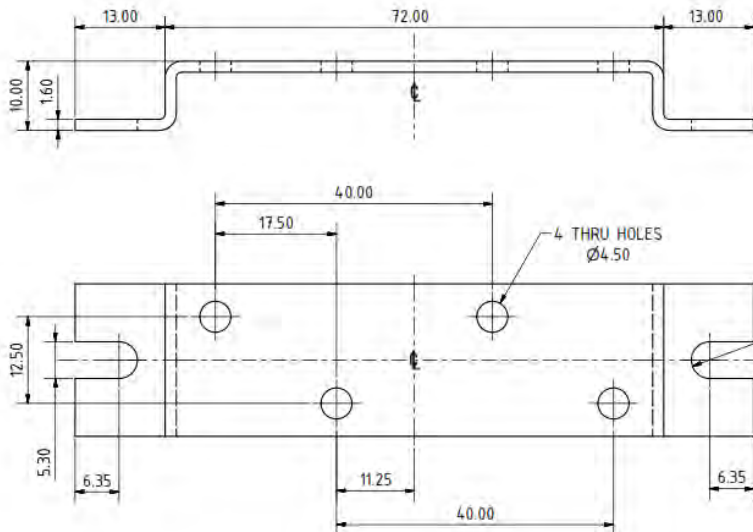
Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

SCHALTBAU

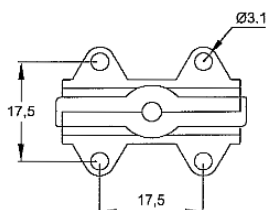
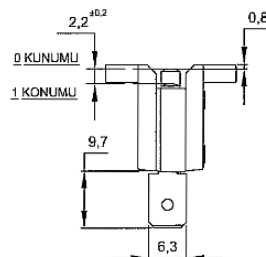
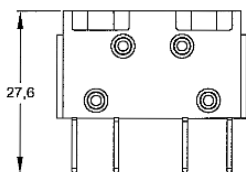
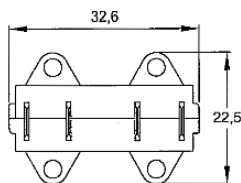
Connect Contact Control

Bracket 1-3603-327508

Screws 1-1603-325872



Auxiliary Switch Option



Specifications

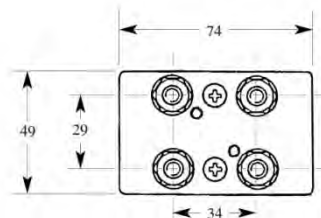
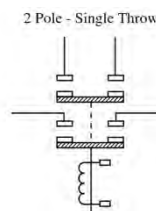
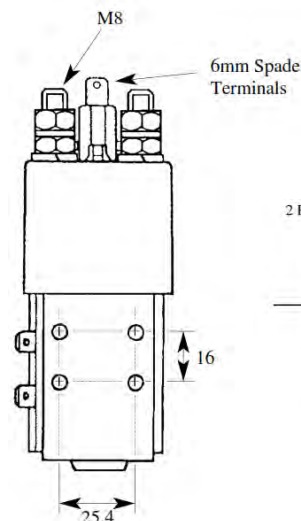
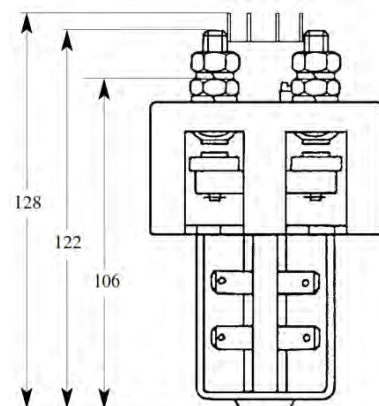
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS809 200A Double Pole Single Throw Contactor



Main Technical Data	AFS809
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x DPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	680g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

SCHALTBAU

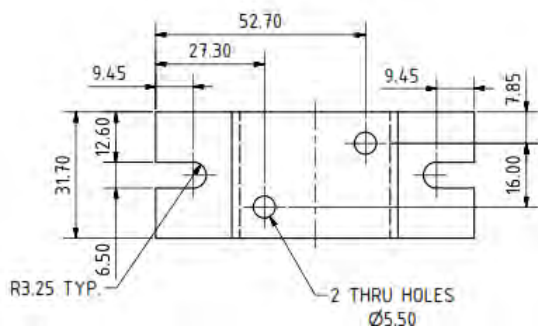
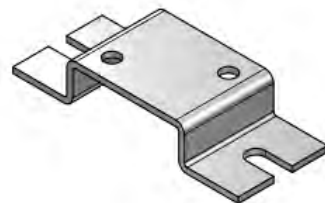
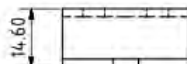
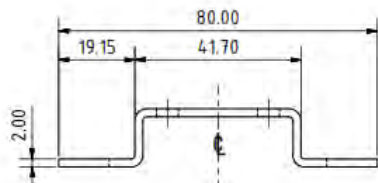
Connect Contact Control

Bracket

1-3603-327512

Screws

1-2529-339559

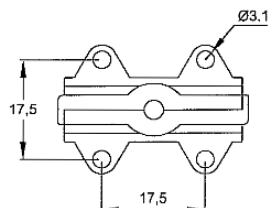
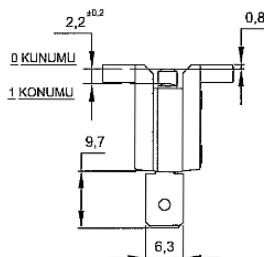
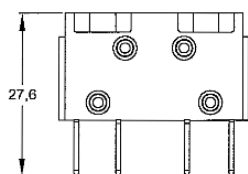
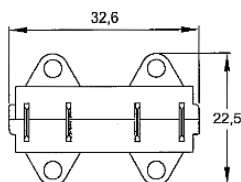


NOTES:

MATERIAL: BRIGHT MILD STEEL EN015 CR4 98 X 2 +0 -0.3

MATERIAL STOCK No 1-4220-331897

Auxiliary Switch Option



Specifications

Max Switching Resistive Current

5A @ 24v DC

Maximum Switching voltage

48V DC

Operating Ambient temp

-20 to +40° C

Protection Rating

Terminals - IP00

Contact terminal size

Contacts - IP40

Mounting hole dimensions

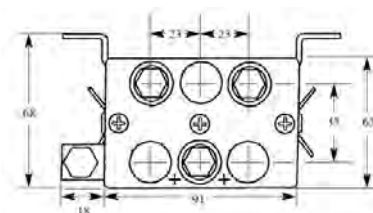
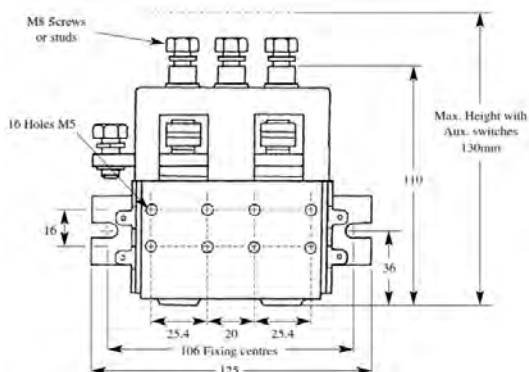
6.3mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

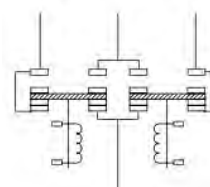
AFS717 200A Double Pole Double Throw Contactor



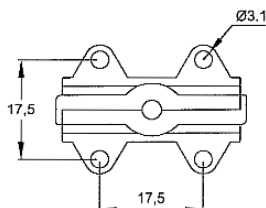
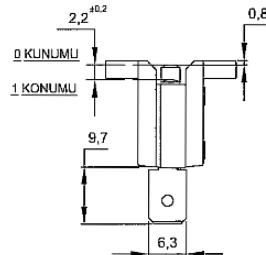
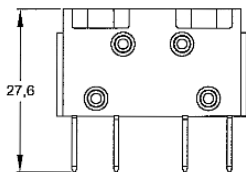
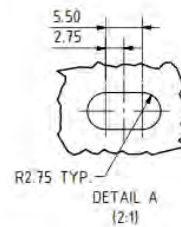
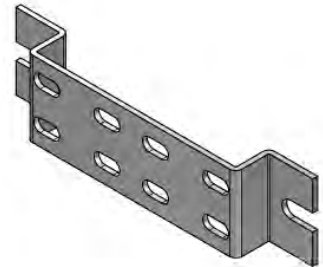
Main Technical Data	AFS717
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	DPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1740g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



2 Pole - Double Throw



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.



5A @ 24v DC
48V DC
-20 to +40° C
Terminals - IP00
Contacts – IP40
6.3mm

6.3mm

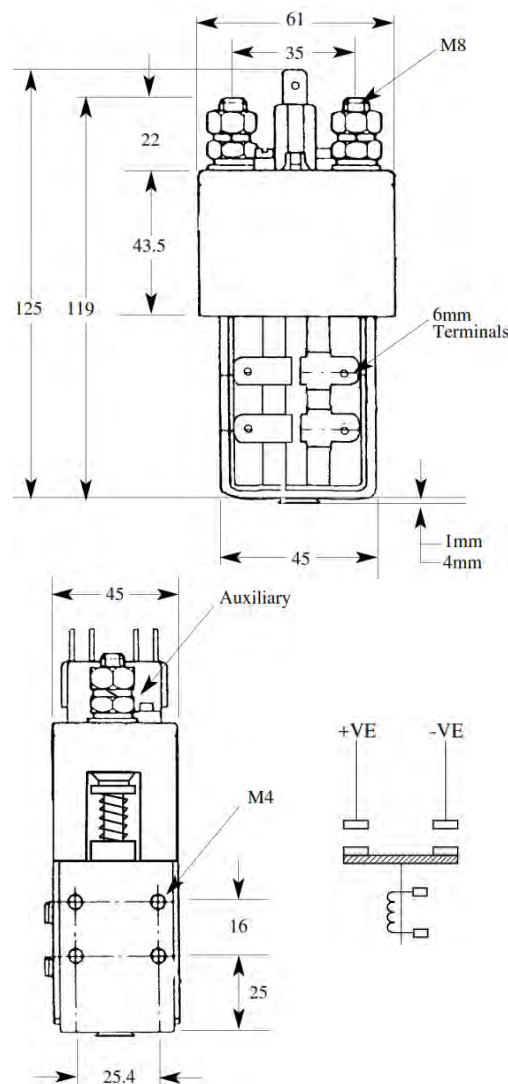
3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS819 200A Single Pole Single Throw Contactor N/O



Main Technical Data	AFS819
Type of current	DC, (Unidirectional without blow out magnets)
Main contacts (number, configuration)	1 x SPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	680g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

SCHALTBAU

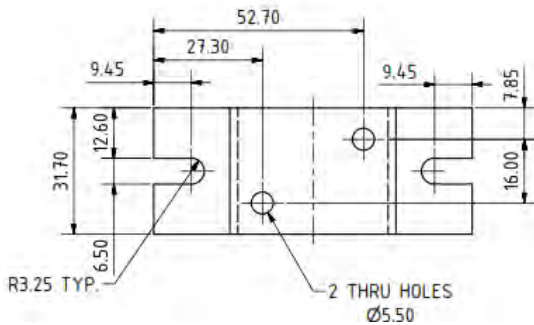
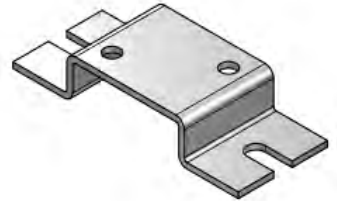
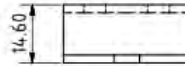
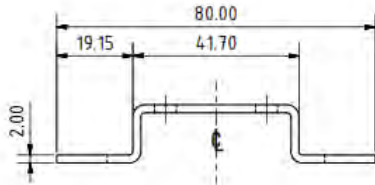
Connect Contact Control

Bracket

1-3603-327512

Screws

1-2529-339559

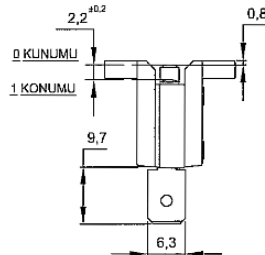
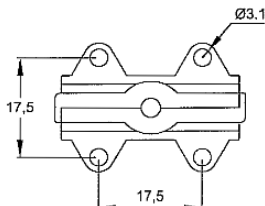
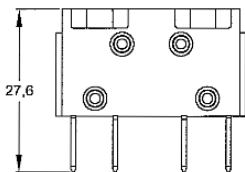
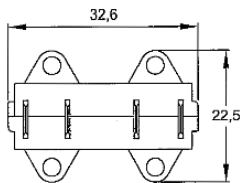


NOTES:

MATERIAL: BRIGHT MILD STEEL EN015 CR4 98 X 2 +0 -0.3

MATERIAL STOCK No 1-4220-331897

Auxiliary Switch Option



Specifications

Max Switching Resistive Current

5A @ 24v DC

Maximum Switching voltage

48V DC

Operating Ambient temp

-20 to +40° C

Protection Rating

Terminals - IP00

Contact terminal size

Contacts - IP40

Mounting hole dimensions

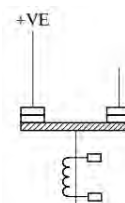
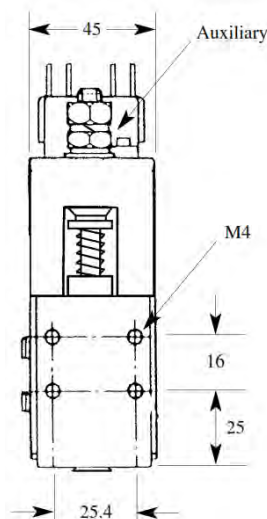
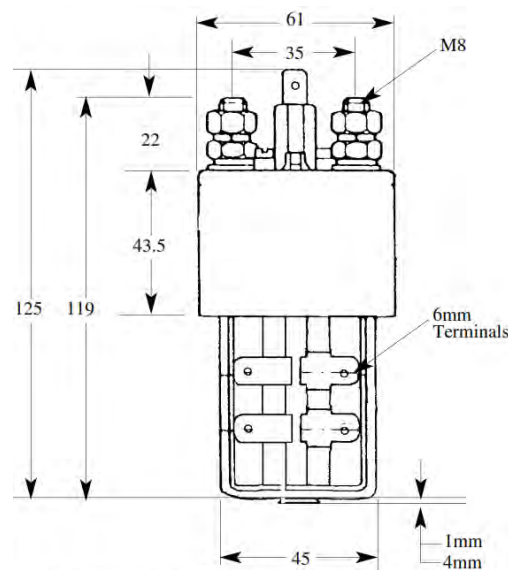
6.3mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS814 200A Single Pole Single Throw Contactor N/C



Main Technical Data	AFS814
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NC
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	680g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

SCHALTBAU

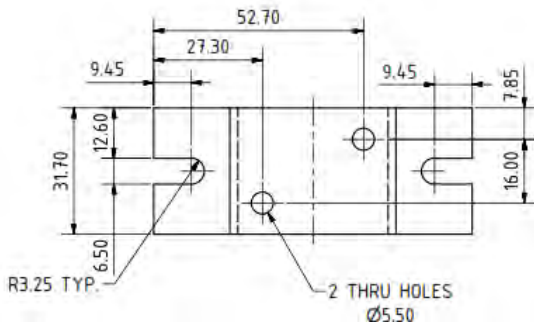
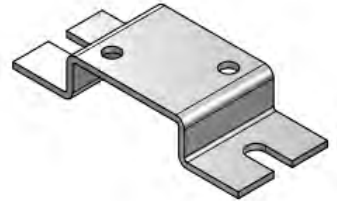
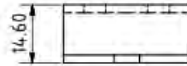
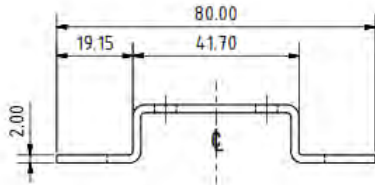
Connect Contact Control

Bracket

1-3603-327512

Screws

1-2529-339559

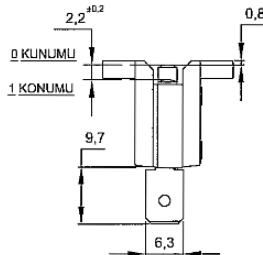
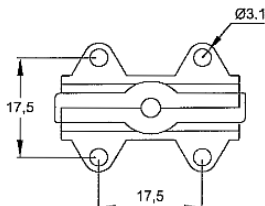
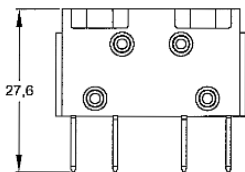
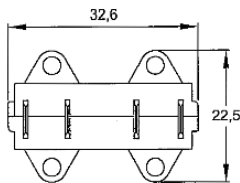


NOTES:

MATERIAL: BRIGHT MILD STEEL EN015 CR4 98 X 2 +0 -0.3

MATERIAL STOCK No 1-4220-331897

Auxiliary Switch Option



Specifications

Max Switching Resistive Current

5A @ 24v DC

Maximum Switching voltage

48V DC

Operating Ambient temp

-20 to +40° C

Protection Rating

Terminals - IP00

Contact terminal size

Contacts - IP40

Mounting hole dimensions

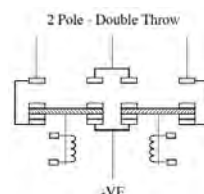
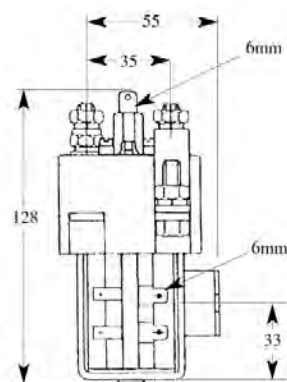
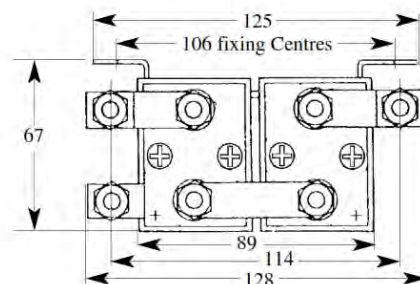
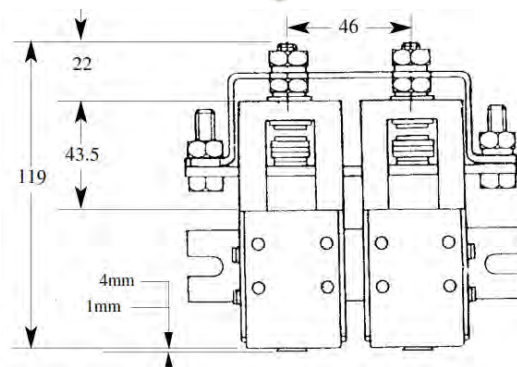
6.3mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS817 200A Double Pole Double Throw Contactor



Main Technical Data	AFS817
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	DPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1870g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity. When Blowout magnets are fitted, load polarity is critical.

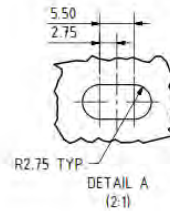
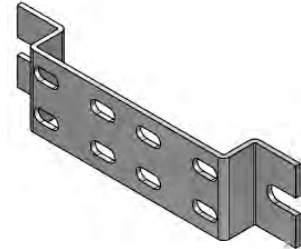
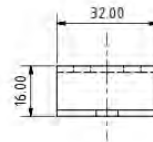
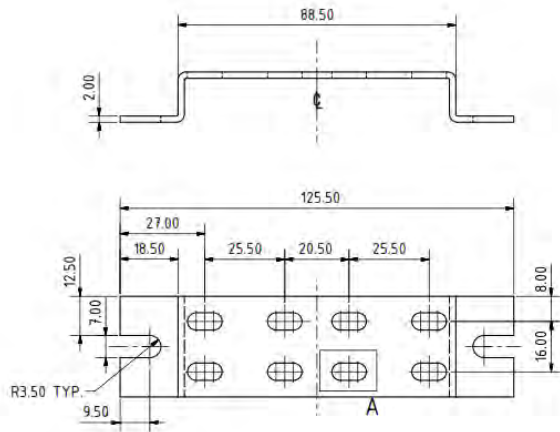
Note Normally Closed contacts are not suited to make and break load.

SCHALTBAU

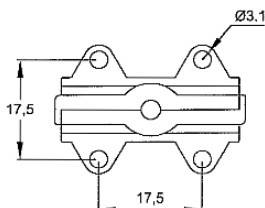
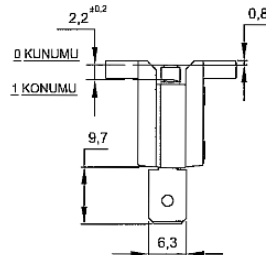
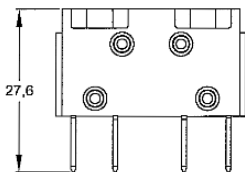
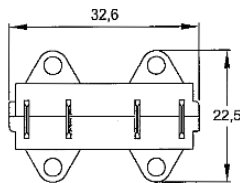
Connect Contact Control

**Bracket
Screws**

**1-3603-327511
1-2529-339559**



Auxiliary Switch Option



Specifications

Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

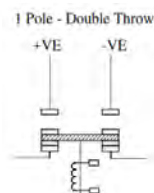
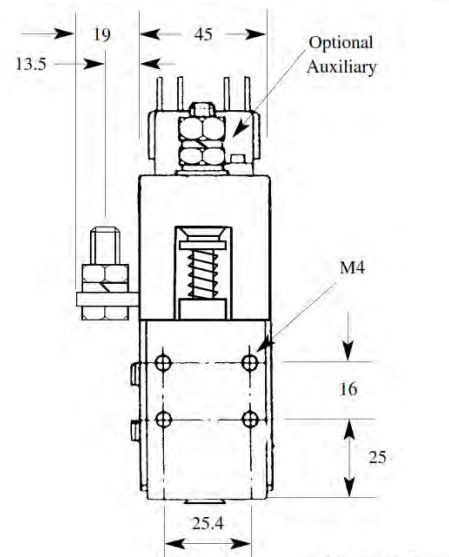
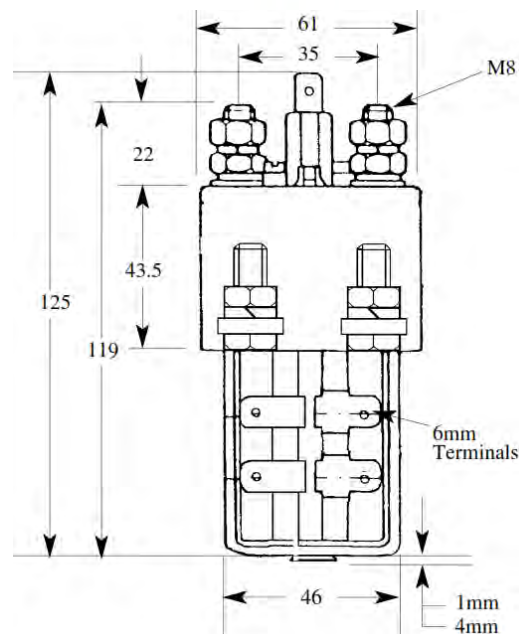
AFS818 200A Single Pole Double Throw Cont



Main Technical Data	AFS818
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	200A <60V DC, 150A @ 80V DC
Short time Overload Capacity	225A 13mins 30s, 300A 2mins 50s, 450A 45s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	275A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm2
Load wire stranded awg	2/0 awg (70mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O2
Terminals	M8
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	70mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	680g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

Please note Normally Closed contacts are not suited to make and break load.



SCHALTBAU

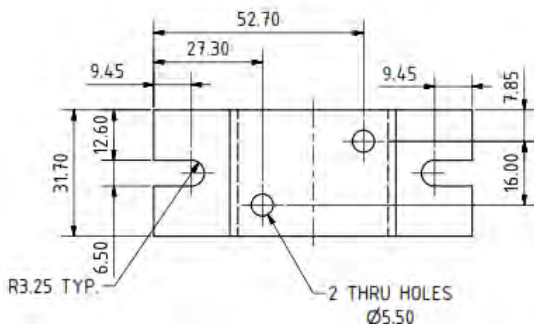
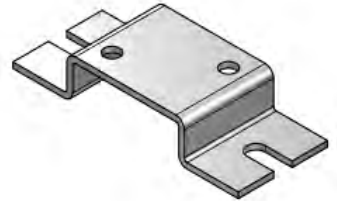
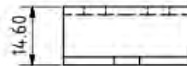
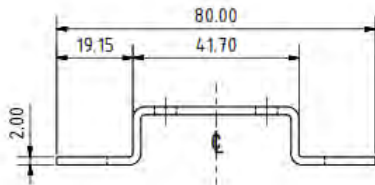
Connect Contact Control

Bracket

1-3603-327512

Screws

1-2529-339559

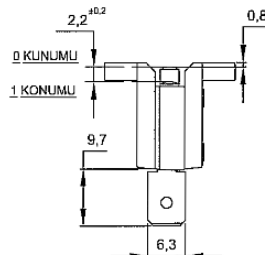
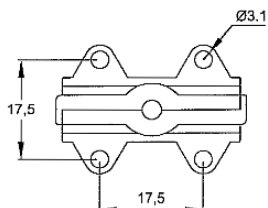
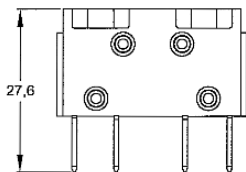
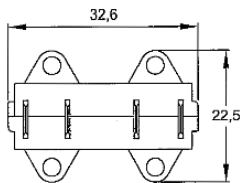


NOTES:

MATERIAL: BRIGHT MILD STEEL EN015 CR4 98 X 2 +0 -0.3

MATERIAL STOCK No 1-4220-331897

Auxiliary Switch Option



Specifications

Max Switching Resistive Current

5A @ 24v DC

Maximum Switching voltage

48V DC

Operating Ambient temp

-20 to +40° C

Protection Rating

Terminals - IP00

Contact terminal size

Contacts - IP40

Mounting hole dimensions

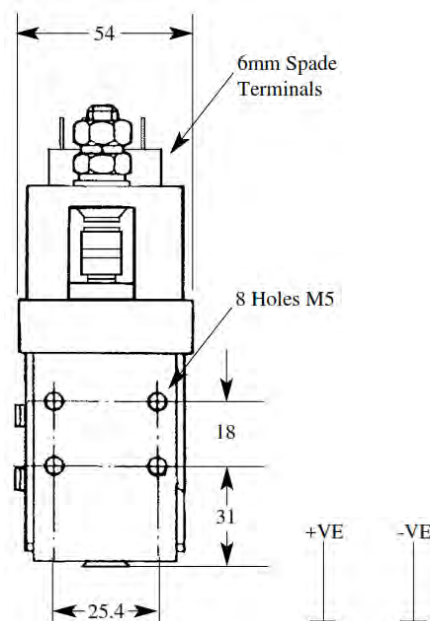
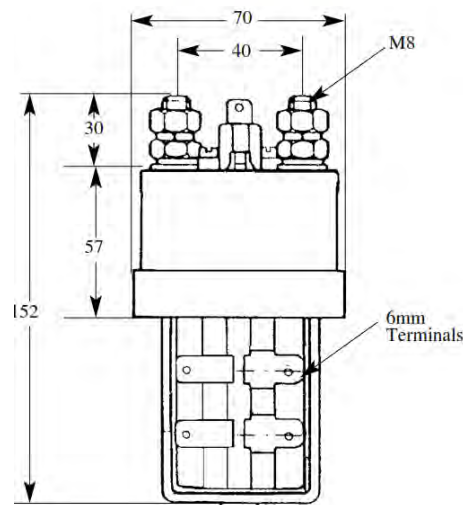
6.3mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS799 350A Single Pole Single Throw Contactor N/O



Main Technical Data	AFS799
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1280g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

SCHALTBAU

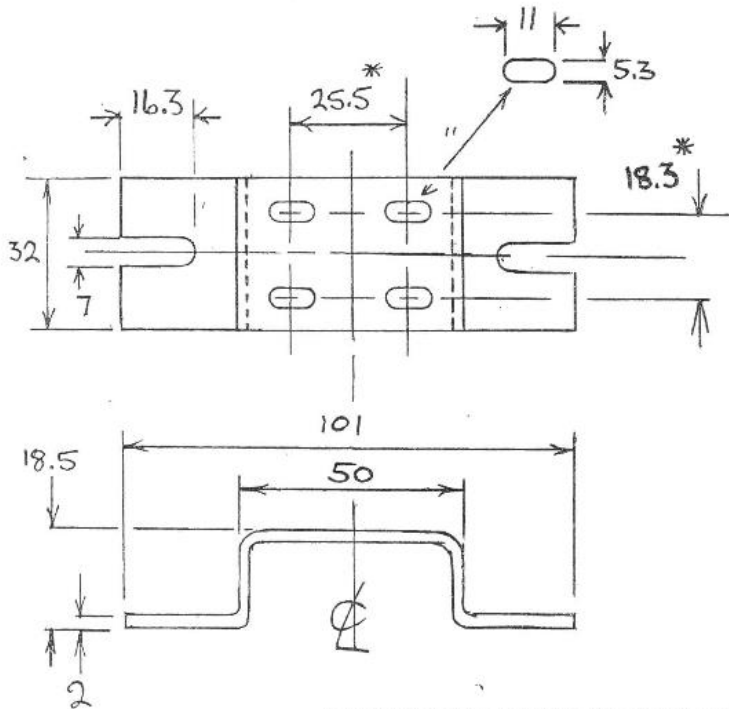
Connect Contact Control

Bracket

1-3603-327520

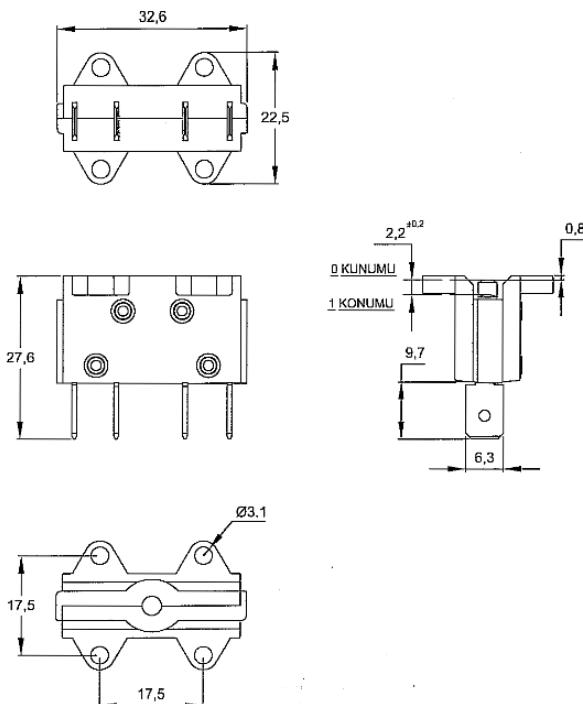
Screws

1-2529-339559



MATERIAL. MILD STEEL.
FINISH. ZINC PLATE AND
YELLOW PASSIVATE
TOLERANCE. * ± 0.1
ALL OTHER ± 0.2 .

Auxiliary Switch Option



Specifications

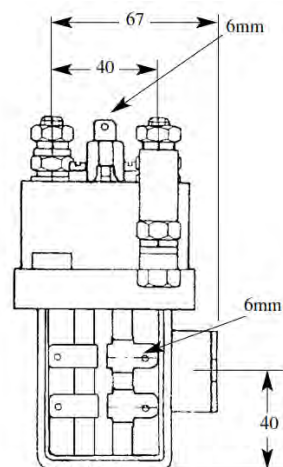
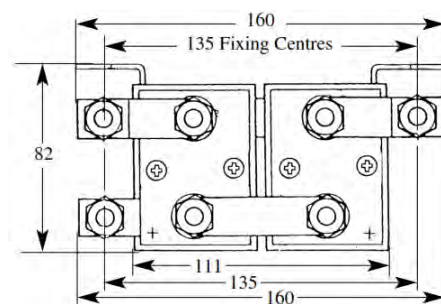
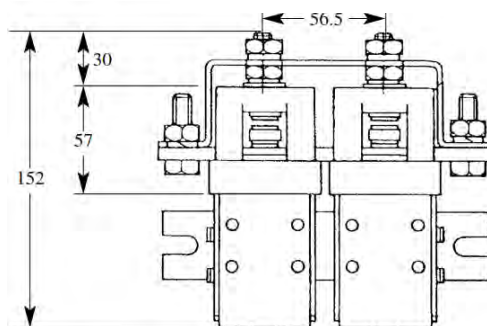
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

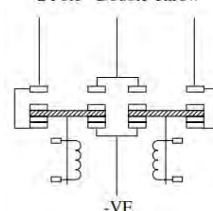


AFS797 350A Double Pole Double Throw Contactor

Main Technical Data	AFS797
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	DPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75.....2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^\circ\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1960g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



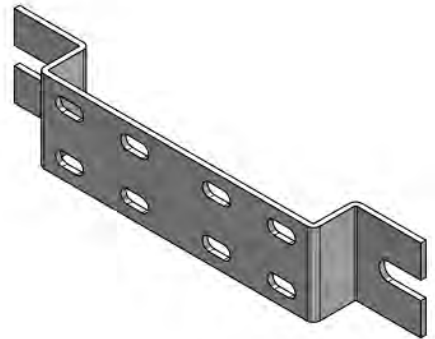
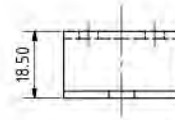
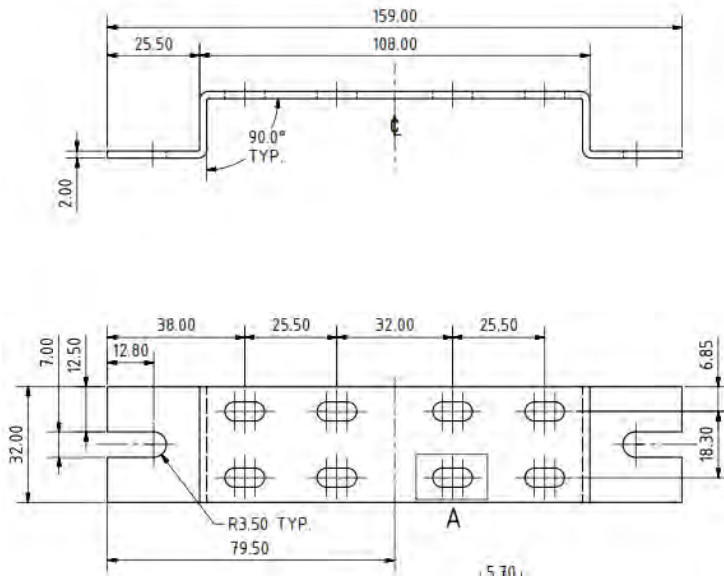
2 Pole - Double Throw



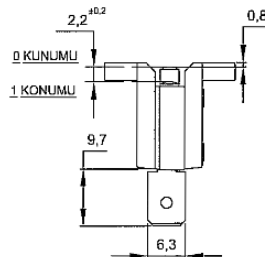
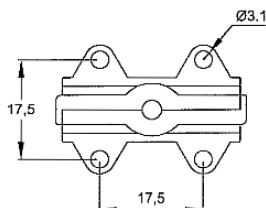
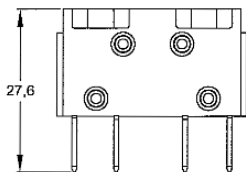
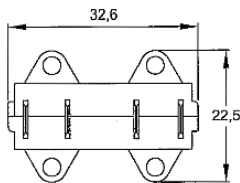
**Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.**

Please note Normally Closed contacts are not suited to make and break load.

1-3603-327519
1-2529-339559



Auxiliary Switch Option



Specifications

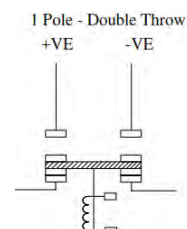
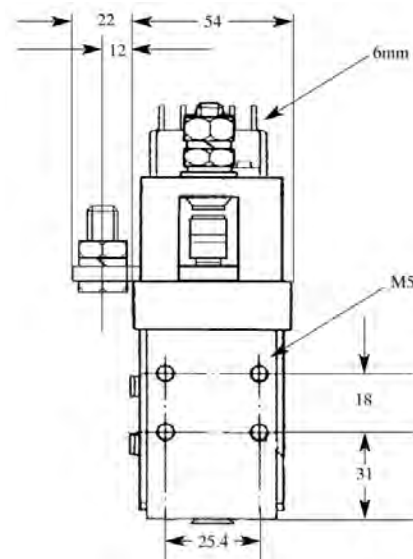
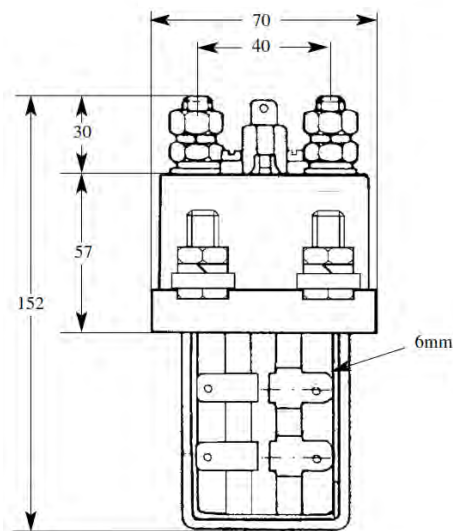
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00 Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS798 350A Single Pole Double Throw Contactor



Main Technical Data	AFS798
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPDT
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1530g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity. When Blowout magnets are fitted, load polarity is critical.

Please note Normally Closed contacts are not suited to make and break load.

SCHALTBAU

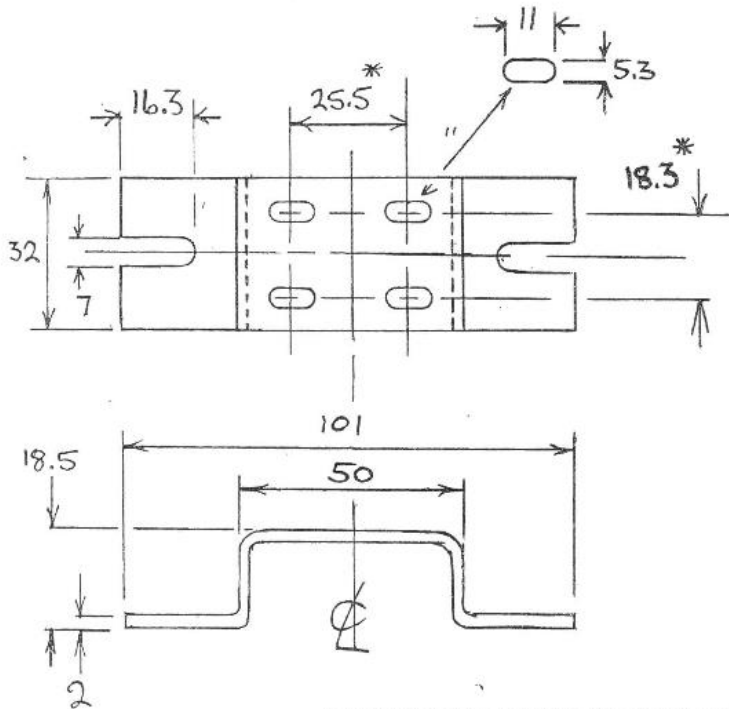
Connect Contact Control

Bracket

1-3603-327520

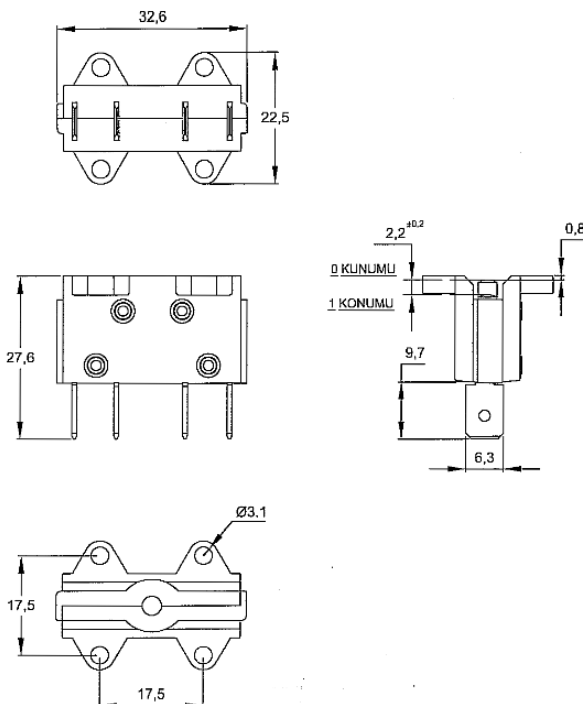
Screws

1-2529-339559



MATERIAL. MILD STEEL.
FINISH. ZINC PLATE AND
YELLOW PASSIVATE
TOLERANCE. * ± 0.1
ALL OTHER ± 0.2 .

Auxiliary Switch Option



Specifications

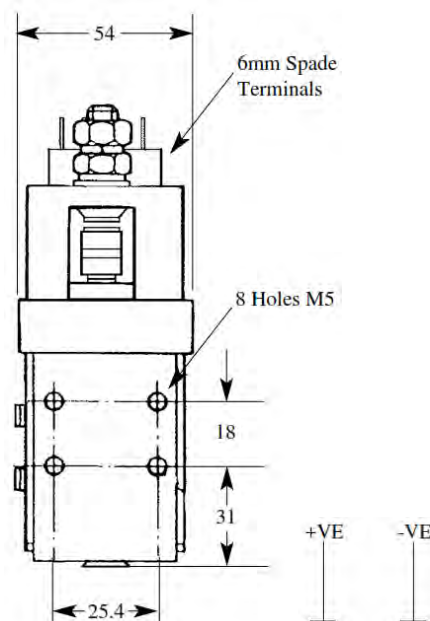
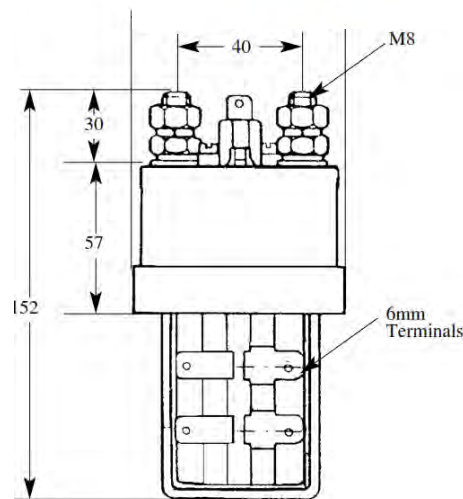
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS789 350A Single Pole Single Throw Contactor N/C



Main Technical Data	AFS789
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NC
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1280g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

SCHALTBAU

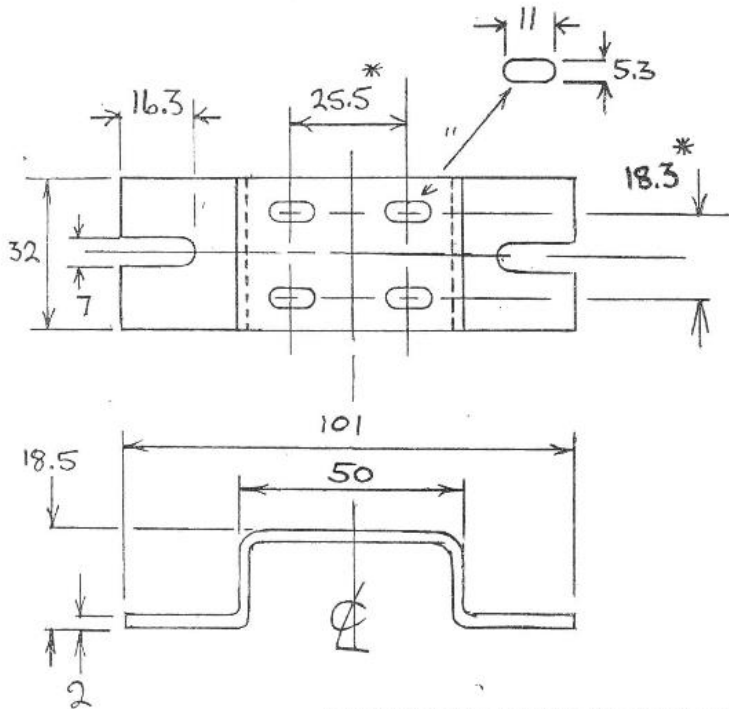
Connect Contact Control

Bracket

1-3603-327520

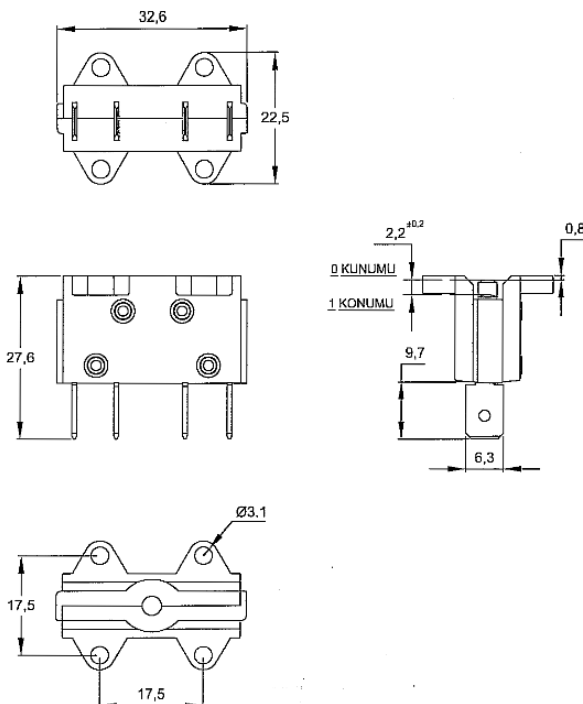
Screws

1-2529-339559



MATERIAL. MILD STEEL.
FINISH. ZINC PLATE AND
YELLOW PASSIVATE
TOLERANCE. * ± 0.1
ALL OTHER ± 0.2 .

Auxiliary Switch Option



Specifications

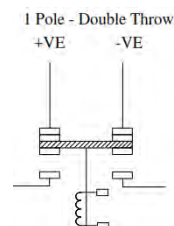
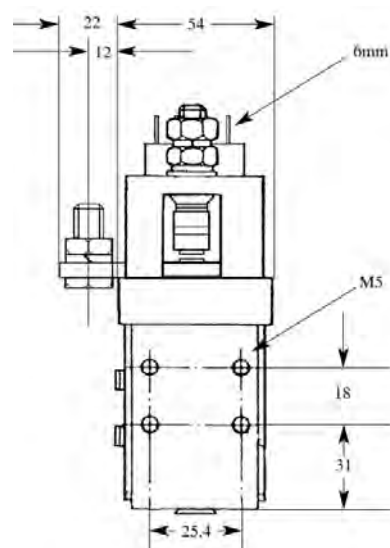
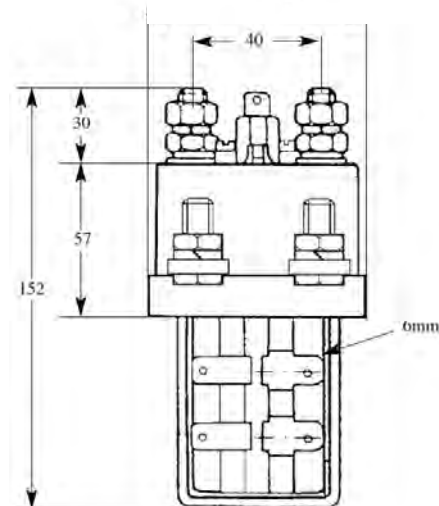
Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00 Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS784 350A Single Pole Double Throw Contactor N/C



Main Technical Data	AFS784
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPDT-NC
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1510g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles



Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

Please note Normally Closed contacts are not suited to make and break load.

SCHALTBAU

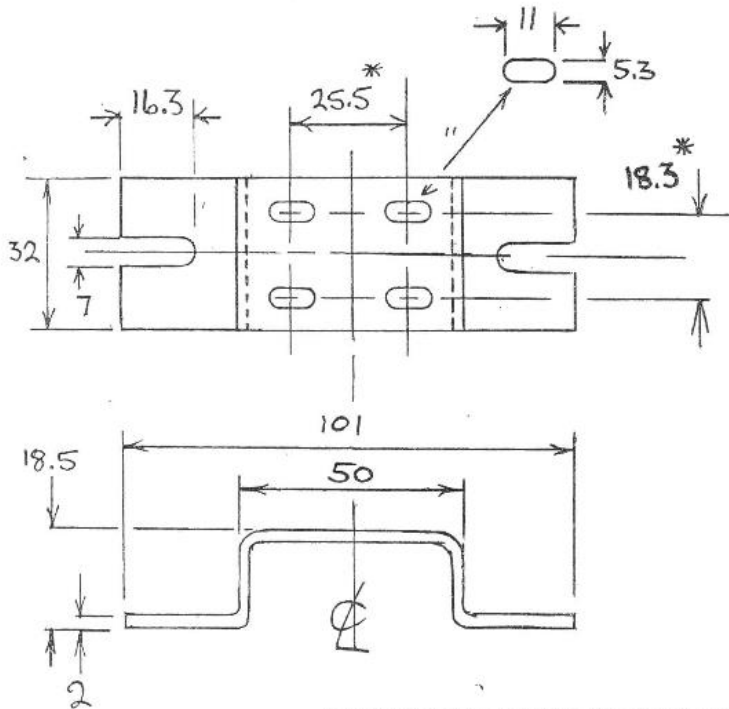
Connect Contact Control

Bracket

1-3603-327520

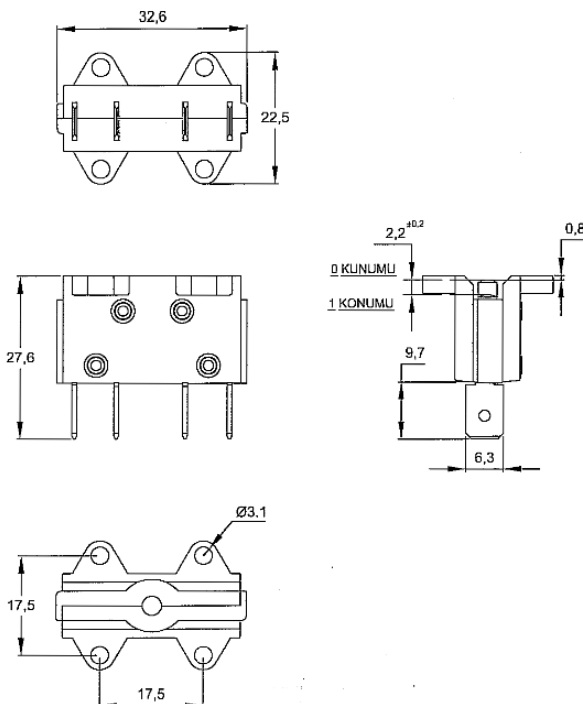
Screws

1-2529-339559



MATERIAL. MILD STEEL.
FINISH. ZINC PLATE AND
YELLOW PASSIVATE
TOLERANCE. * ± 0.1
ALL OTHER ± 0.2 .

Auxiliary Switch Option

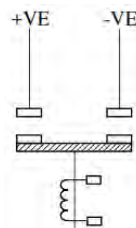
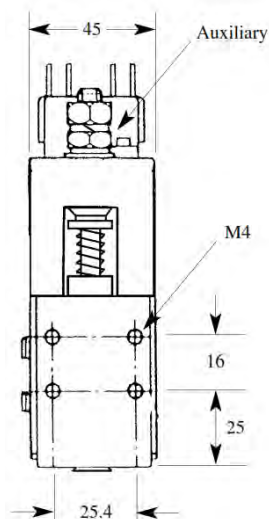
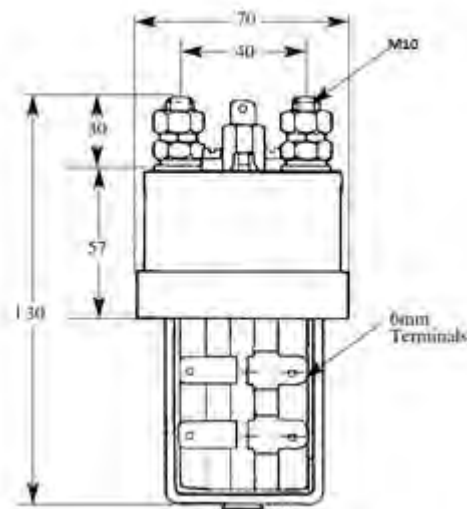


Specifications

Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

AFS881 350A Single Pole Single Throw Contactor N/O



Main Technical Data	AFS881
Type of current	DC, (Unidirectional with blow out magnets)
Main contacts (number, configuration)	1 x SPST-NO
Nominal voltage U_n	48 V (80 V)
Rated operating voltage U_e	48 V (80 V)
Rated insulation voltage U_{Nm} (U_i)	80 V (150 V)
Rated impulse withstand voltage U_{Ni} (U_{imp})	0.8 kV (1.5 kV)
Pollution degree / Overvoltage category	PD3 / OV2
Conventional free air thermal current I_{th}	350A < 60V DC, 250A @ 80V DC
Short time Overload Capacity	375A 19mins, 500A 4mins 15s, 750A 50s
Dielectric Strength EN1175-1, EN60947-1	1000V, 1500V
Load @ 30% Duty Cycle	450A (3 min on, 7 mins off)
IEC Wire	2 x (0.75..... 2.5) mm ²
Load wire stranded awg	4/0 awg (120mm csa)
Contact Pressure	>3 cN (or 3 g/A) of I_{th}
Main contacts	EN1175-1 type A
Contact material	Ag Sn O ₂
Terminals	M10
Main contacts wetting current	10mA @ 24V DC
Magnetic Coil	
Nominal control supply voltage U_{sn}	6V to 240V DC
Operating range of U_s	0.7x U_{sn} ... 1.10x U_{sn}
Coil Tolerance (use of letter E)	-30%...+10% U_s
Coil Power consumption at U_n and $T_a=20^{\circ}\text{C}$	14W to 43W
Suppression option	Diode, Diode + Resistor
Degree of protection (IEC 60529)	Terminals IP00, Contact Zone IP40
Vibrations and shock (IEC 60068-2-6, 2.7)	5g (10Hz...200Hz) 100g (6ms, half sinus)
Mounting position	Vertical / horizontal
Mounting	M5 Screws, brackets
Arc Chute minimum clearance distance	100mm from any surface
Temperature	
Operating temperature	Minus 20°C to plus 40°C
Storage temperature	-40 °C ... +85 °C
Altitude	< 2,000 m above sea level
Humidity (EN 50125-1)	< 95% relative humidity, yearly average
Torque values	
Main terminals	max 7Nm
Coil terminals	6.3mm spade connectors
Weight	1660g
Load Class / Utilization Category	1, cat 1..... EN60947-4-1 DC1
Mechanical endurance	> 1,000,000 operating cycles

Note – Always ensure cable size is sufficient to cope with the load and contactor capacity.
When Blowout magnets are fitted, load polarity is critical.

SCHALTBAU

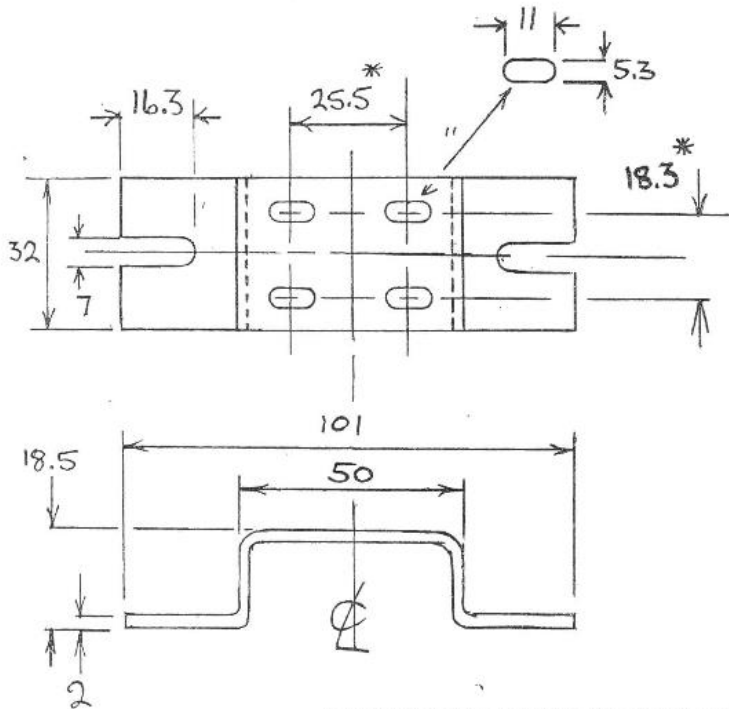
Connect Contact Control

Bracket

1-3603-327520

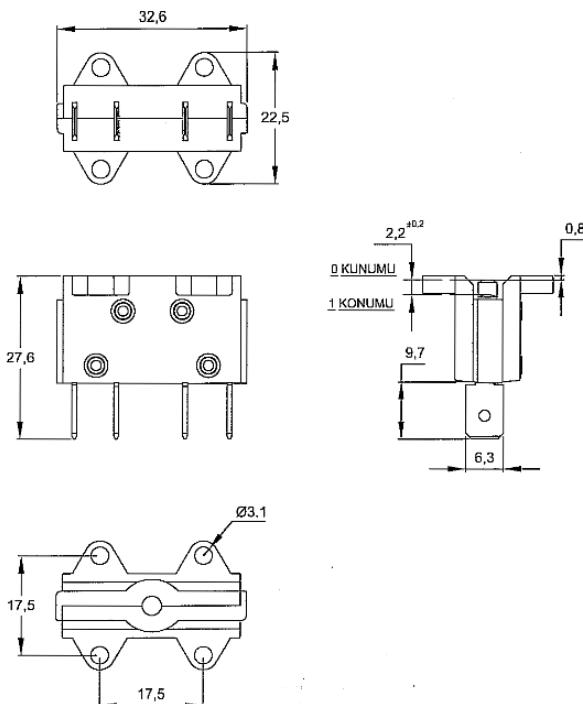
Screws

1-2529-339559



MATERIAL. MILD STEEL.
FINISH. ZINC PLATE AND
YELLOW PASSIVATE
TOLERANCE. * ± 0.1
ALL OTHER ± 0.2 .

Auxiliary Switch Option

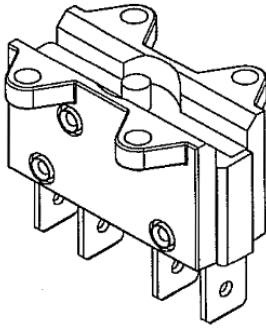


Specifications

Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00
	Contacts - IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm

Class 2 or Limited Voltage/Current circuit
(per UL60947-1, Clause DVC.1.5)

A2079 Auxiliary Switch



Specifications

Max Switching Resistive Current	5A @ 24v DC
Maximum Switching voltage	2A @ 48V DC
Operating Ambient temp	-20 to +40° C
Protection Rating	Terminals - IP00 Contacts – IP40
Contact terminal size	6.3mm
Mounting hole dimensions	3.1mm
Class 2 or Limited Voltage/Current circuit (per UL60947-1, Clause DC 1.5)	

The A2079 Auxiliary switch is an optional extra on most of our AFS contactor range.

This switch will allow direct mechanical monitoring of the contactor action and will allow current up to 5A @ 24V DC to pass through it.

These switches have both normally open and closed connections giving flexibility of monitoring options. Mounting is via M3x8 Socket HD Cap Screw Z/P this is in addition to a brass plunger and a compression spring.

Kits *

AFS19

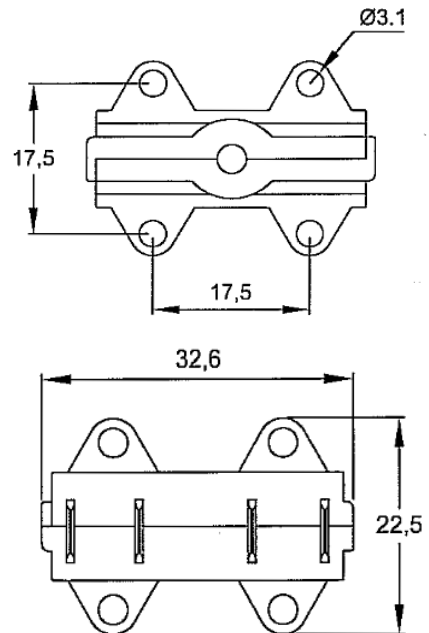
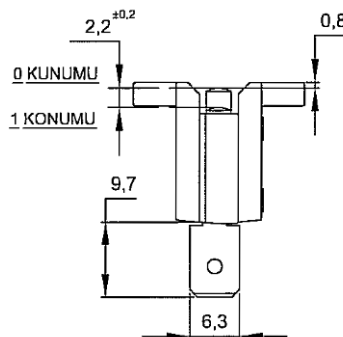
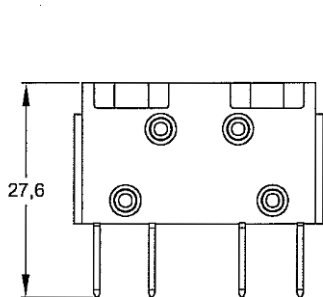
AFS819

AFS799

A2079

A2080/01

A2081



*** Denotes full replacement components**

