



- Rated load: 300A at 120VDC
- Auxiliary contact option
- Bi-stable (Latching) option
- Magnet arc "blowout" standard
- For battery storage applications

Contacts   Contact arrangement   SPST-NO-DM     Contact material   AgCu Alley   D S C 3 0 M - 4 0 2 1 - 2 8 - 1 0 2 4 - S 2     Max. switching voltage   DC 120VDC   DS C Saries     Max. durate load (resistive, cos q=1)   DC1 300A 120VDC     Max. continuous thermal current   3000 A     Fault current breaking capacity (resistive)   3000A @ 120VDC (UL508)     Terminal temperature rise above ambient   <70°C. IEC EN60947, GB14/14048.4     Contact voltage drop   max. s80m/@ 500A     Auxiliary contact (when fitted)   arrangement     Max. current breaking capacity (resistive)   SPST-NO + SPST-NC     max. current   5A @ 24VDC / 2A @ 48VDC     max. current   100 m @ 5V     Coli   28: Open frame and M8 male stud power terminals     Coli   28: Open frame and M8 male stud power terminals     Coli   28: Open frame and M8 male stud power terminals     Coli   29: Open frame and M8 male stud power terminals     Insulation   15-25W hold (non-Latch), 15-35W pulse (Latch)     Norking duty   Continuous (not magnetic latch type)   D: Parallel back emf diode suppression diode (bi-stable cols)     Insulation resistance   initial 100MQ (Min.) @500									
Contact material     AgCu Alloy     D S C 3 0 M - 4 0 2 1 - 2 8 - 1 0 2 4 - 5 2       Max. switching voltage     DC     120VDC     DSC Series     Coll codes       Rated load (resistive, cos φ=1)     DC1     300A 120VDC     DSC Series     See tables 1 & 2       Max. continuous thermal current     300A     300A (20VDC (UL508)     See tables 1 & 2       Fault current breaking capacity (resistive)     3000A (20VDC (UL508)     Contact arrangement       Farminal temperature rise above ambient     <70°C. IEC EN00947, GB14/14048.4     Contact arrangement       Contact voltage drop     max. s80mV (200A     4021: SPST-NO-DM       Maxing contact (when fitted)     arrangement     SPST-NC       max. current     5A (2 2 VDC / 2A (2 48VDC)     Body style       Coll     max. current     5A (2 2 VDC / 2A (2 48VDC)       Rated Voltage (see table 1)     DC     12, 24, 48, 60, 72, 80, 96, 120VDC     Accessory options       Rated voltage (see table 1)     DC     12, 24, 48, 60, 72, 80, 96, 120VDC     Accessory options       Rated power consumption     15~25W hold (non-Latch), 15~35W pulse (Latch)     Blank: No option       Mourting (see table 1)     DC     1000Q, (Min.) @500VDC <th>Contacts</th> <th></th> <th>Ordering Code</th>	Contacts		Ordering Code						
Max. switching voltage   DC   120'DC   DSC Series   Coll codes     Rated load (resistive, cos q=1)   DC1   300A   120'DC   DSC Series   Solt. Magnet arc blowout   See tables 1 & 2     Max. continuous thermal current   300A   300A (2120'DC (UL508)   Contact arrangement   See tables 1 & 2     Fault current breaking capacity (resistive)   3000A (2120'DC (UL508)   Contact arrangement   See tables 1 & 2     Terminal temperature rise above ambient   <70'C. IEC EN60947, GB14/14048.4	Contact arrangement	SPST-NO-DM							
Rated load (resistive, cos q=1)   DC1   300A 120VDC   DSC Series   Coll codes     Max. continuous thermal current   300A   300A (20 VDC (UL508)   30M: Magnet arc blowout   See tables 1 & 2     Fault current breaking capacity (resistive)   3000A (20 VDC (UL508)   Contact arrangement   See tables 1 & 2     Terminal temperature rise above ambient   <70°C. IEC EN60947, GB 14/14048.4	Contact material	AgCu Alloy	DSC30M-4021-28-1024-S2L						
Max. continuous thermal current300A30M: Magnet arc blowoutSee tables 1 & 2Fault current breaking capacity (resistive)3000A @ 120VDC (UL508)Contact arrangementSee tables 1 & 2Terminal temperature rise above ambient<70°C. IEC EN60947, GB14/14048.4	Max. switching voltage DC	120VDC							
Fault current breaking capacity (resistive)     3000 @ 120VDC (UL508)     Contact arrangement       Terminal temperature rise above ambient     <70°C. IEC EN60947, GB14/14048.4	Rated load (resistive, cos φ=1) DC1	300A 120VDC	DSC Series Coil codes						
Terminal temperature rise above ambient<70°C. IEC EN60947, GB14/14048.4Contact arrangement 4021: SPST-NO-DMAuxiliary contact (when fitted)arrangement SPST-NO + SPST-NC4021: SPST-NO-DMMaxiliary contact (when fitted)arrangement SPST-NO + SPST-NCBody stylemax. current5A @ 24VDC / 2A @ 48VDCBody styleauxiliary contact (when fitted)arrangement SPST-NO + SPST-NCBody stylemax. current5A @ 24VDC / 2A @ 48VDCBody styleauxiliary contact (when fitted)arrangement SPST-NO + SPST-NCAccessory optionsRated Voltage (see table 1)DC 12, 24, 48, 60, 72, 80, 96, 120VDCAccessory optionsRated power consumption15-25W hold (non-Latch), 15-35W pulse (Latch)Blank: No optionWorking dutyContinuous (not magnetic latch type)S: Auxiliary switchD: Parallel back emf diode suppression (standard coils)InsulationInsulation resistanceinitial 100MQ (Min.) @500VDCT: Parallel TVS back emf suppression (standard coils)Dielectric strengthcoil to contact 1000V <sub>mm</sub> (50/60Hz) / <1mA / 1min (at sea level)	Max. continuous thermal current	300A	30M: Magnet arc blowout See tables 1 & 2						
Contact voltage drop   max. \$80mV @ 500A   4021: SPST-NO-DM     Auxiliary contact (when fitted)   arrangement   SPST-NO + SPST-NC     max. current   5A @ 24VDC / 2A @ 48VDC   Body style     2   Body style   280 Open frame and M8 male stud power terminals     Coil   Excessory options   Blank: No option     Rated voltage (see table 1)   DC   12, 24, 48, 60, 72, 80, 96, 120VDC   Accessory options     Rated power consumption   15~25W hold (non-Latch), 15~35W pulse (Latch)   Blank: No option   Si Auxiliary switch     Insulation   Continuous (not magnetic latch type)   Si Auxiliary switch   T: Parallel back emf diode suppression (standard coils)     Insulation resistance   initial   100MQ (Min.) @500VDC   T: Parallel TVS back emf suppression (standard coils)     Dielectric strength   coil to contact   1000V <sub>rm</sub> (50/60Hz) / s1mA / 1 min (at sea level)   Mounting (see Fig. 2)     Blank: No bracket   1000V <sub>rm</sub> (50/60Hz) / s1mA / 1 min (at sea level)   Mounting (see Fig. 2)     General Data   1000V <sub>rm</sub> (50/60Hz) / s1mA / 1 min (at sea level)   Mounting (see Fig. 2)     Operate / bounce time at 20°C   max   60ms / 5ms   21: Two 'L' shaped mounting bracket     Qperate / bounce time at 20°C   <	Fault current breaking capacity (resistive)	3000A @ 120VDC (UL508)							
Auxiliary contact (when fitted)   arrangement   SPST-NC   Body style     max. current   5A @ 24VDC / 2A @ 48VDC   Body style     Coll   28: Open frame and M8 male stud power terminals     Rated Voltage (see table 1)   DC   12, 24, 48, 60, 72, 80, 96, 120VDC   Accessory options     Rated Voltage (see table 1)   DC   12, 24, 48, 60, 72, 80, 96, 120VDC   Accessory options     Rated power consumption   15-25W hold (non-Latch), 15~35W pulse (Latch)   Blank: No option   S: Auxiliary switch     Working duty   Continuous (not magnetic latch type)   S: Auxiliary switch   D: Parallel back emf diode suppression (standard coils)     Insulation   D: Parallel back emf diode suppression diode (bi-stable coils)   T: Parallel TVS back emf suppression diode (bi-stable coils)     Dielectric strength   coil to contat   1000Vms (50/60Hz) / 1mA / 1 min (at sea level)   Mounting (see Fig. 2)     Blank: No bracket   Si Contact to contat   1000Vms (50/60Hz) / 1mA / 1 min (at sea level)   Mounting bracket     Operate / bounce time at 20°C   max   60ms / 5ms   21: Two 'L' shaped mounting bracket     Querta / bounce time at 20°C   max   60ms / 5ms   21: Two 'L' shaped mounting brackets     Release time   60ms <t< td=""><td>Terminal temperature rise above ambient</td><td>&lt;70°C. IEC EN60947, GB14/14048.4</td><td>Contact arrangement</td></t<>	Terminal temperature rise above ambient	<70°C. IEC EN60947, GB14/14048.4	Contact arrangement						
max. current   5A @ 24VDC / 2A @ 48VDC   Body style     min. current   100mA @ 5V   28: Open frame and M8 male stud power terminals     Coil     Rated Voltage (see table 1)   DC   12, 24, 48, 60, 72, 80, 96, 120VDC   Accessory options     Rated power consumption   15~25W hold (non-Latch), 15~35W pulse (Latch)   Blank: No option   SAuliary switch     Working duty   Continuous (not magnetic latch type)   S: Auxiliary switch   D: Parallel back emf diode suppression (standard coils)     Insulation   D: Parallel TVS back emf suppression diode (bi-stable coils)   T: Parallel TVS back emf suppression diode (bi-stable coils)     Dielectric strength   coil to contact   1000Vma (50/60Hz) / <1mA / 1 min (at sea level)	Contact voltage drop max.	≤80mV @ 500A	4021: SPST-NO-DM						
min. current   100mA @ 5V   28: Open frame and M8 male stud power terminals      Coil   28: Open frame and M8 male stud power terminals     Rated Voltage (see table 1)   DC   12, 24, 48, 60, 72, 80, 96, 120VDC   Accessory options     Rated power consumption   15~25W hold (non-Latch), 15~35W pulse (Latch)   Blank: No option   Blank: No option     Working duty   Continuous (not magnetic latch type)   S: Auxiliary switch   D: Parallel back emf diode suppression (standard coils)     Insulation   rs Parallel TVS back emf suppression (standard coils)   T: Parallel TVS back emf suppression diode (bi-stable coils)     Insulation resistance   initial   100MQ (Min.) @500VDC   T: Parallel TVS back emf suppression diode (bi-stable coils)     Dielectric strength   coil to contact   1000V <sub>ms</sub> (50/60Hz) / <1mA / 1 min (at sea leve)	Auxiliary contact (when fitted) arrangement	SPST-NO + SPST-NC							
CoilRated Voltage (see table 1)DC12, 24, 48, 60, 72, 80, 96, 120VDCAccessory optionsRated power consumption15~25W hold (non-Latch), 15~35W pulse (Latch)Blank: No optionWorking dutyContinuous (not magnetic latch type)S: Auxiliary switchInsulationContinuous (not magnetic latch type)S: Auxiliary switchInsulation resistanceinitial100MΩ (Min.) @500VDCT: Parallel back emf diode suppression (standard coils)Insulation resistanceinitial100MΩ (Min.) @500VDCT: Parallel TVS back emf suppression diode (bi-stable coils)Dielectric strengthcoil to contact1000V <sub>ms</sub> (50/60Hz) / <1mA / 1 min (at sea level)	max. current	5A @ 24VDC / 2A @ 48VDC	Body style						
Rated Voltage (see table 1)DC12, 24, 48, 60, 72, 80, 96, 120VDCAccessory optionsRated power consumption15~25W hold (non-Latch), 15~35W pulse (Latch)Blank: No optionWorking dutyContinuous (not magnetic latch type)S: Auxiliary switchInsulationD: Parallel back emf diode suppression (standard coils)Insulation resistanceinitial100MΩ (Min.) @500VDClife emd50MΩ (Min.)Dielectric strengthcoil to contact1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	min. current	100mA @ 5V	28: Open frame and M8 male stud power terminals						
Rated power consumption15~25W hold (non-Latch), 15~35W pulse (Latch)Blank: No optionWorking dutyContinuous (not magnetic latch type)S: Auxiliary switchInsulationD: Parallel back emf diode suppression (standard coils)Insulation resistanceinitial100MΩ (Min.) @500VDCIffe end50MΩ (Min.)Terarallel TVS back emf suppression diode (bi-stable coils)Dielectric strengthcoil to contact1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	Coil								
Working dutyContinuous (not magnetic latch type)S: Auxiliary switchInsulationD: Parallel back emf diode suppression (standard coils)Insulation resistanceinitial100MΩ (Min.) @500VDCIffe end50MΩ (Min.)T: Parallel TVS back emf suppression diode (bi-stable coils)Dielectric strengthcoil to contact100Vrms (50/60Hz) / <1mA / 1 min (at sea level)Mounting (see Fig. 2)Insulation resistance100Vrms (50/60Hz) / <1mA / 1 min (at sea level)Mounting (see Fig. 2)Dielectric strengthcontact to contact1000Vrms (50/60Hz) / <1mA / 1 min (at sea level)Mounting (see Fig. 2)General DataContact to contact000Vrms (50/60Hz) / <1mA / 1 min (at sea level)It: One 'L' shaped mounting bracketOperate / bounce time at 20°Cmax60ms / 5ms2L: Two 'L' shaped mounting bracketsRelease time60ms2P: Two 'P' shaped mounting bracketsElectrical lifeat rated load20,000 operationsW: "W" shaped bracket	Rated Voltage (see table 1) DC	12, 24, 48, 60, 72, 80, 96, 120VDC	Accessory options						
InsulationD: Parallel back emf diode suppression (standard coils)Insulation resistanceinitial 100MΩ (Min.) @500VDCD: Parallel TVS back emf suppression diode (bi-stable coils)Iffe end50MΩ (Min.)T: Parallel TVS back emf suppression diode (bi-stable coils)Dielectric strengthcoil to contact1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	Rated power consumption	15~25W hold (non-Latch), 15~35W pulse (Latch)	Blank: No option						
Insulation resistanceinitial100MΩ (Min.) @500VDCT. Parallel TVS back emf suppression diode (bi-stable coils)life end50MΩ (Min.)Dielectric strengthcoil to contact1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	Working duty	Continuous (not magnetic latch type)	S: Auxiliary switch						
Iffe end   50MΩ (Min.)     Dielectric strength   coil to contact     contact to contact   1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	Insulation		D: Parallel back emf diode suppression (standard coils)						
Dielectric strength   coil to contact   1000Vms (50/60Hz) / <1mA / 1 min (at sea level)   Mounting (see Fig. 2)     Contact to contact   1000Vms (50/60Hz) / <1mA / 1 min (at sea level)	Insulation resistance initial	100MΩ (Min.) @500VDC	T: Parallel TVS back emf suppression diode (bi-stable coils)						
contact to contact 1000Vrms (50/60Hz) / <1mA / 1 min (at sea level)Blank: No bracketGeneral Data1L: One 'L' shaped mounting bracket2L: Two 'L' shaped mounting bracketsOperate / bounce time at 20°Cmax.60ms / 5ms2P: Two 'L' shaped mounting bracketsRelease time60ms2P: Two 'P' shaped mounting bracketsElectrical lifeat rated load20,000 operationsW: "W" shaped bracket	life end	50MΩ (Min.)							
General Data   1L: One 'L' shaped mounting bracket     Operate / bounce time at 20°C   max. 60ms / 5ms     Release time   60ms     Electrical life   at rated load     20,000 operations   W: "W" shaped bracket	Dielectric strength coil to contact	$1000V_{\text{rms}}$ (50/60Hz) / <1mA / 1 min (at sea level)	Mounting (see Fig. 2)						
Operate / bounce time at 20°Cmax.60ms / 5ms2L: Two 'L' shaped mounting bracketsRelease time60ms2P: Two 'P' shaped mounting bracketsElectrical lifeat rated load20,000 operationsW: "W" shaped bracket	contact to contact	$1000V_{\text{rms}}$ (50/60Hz) / <1mA / 1 min (at sea level)	Blank: No bracket						
Release time 60ms 2P: Two 'P' shaped mounting brackets   Electrical life at rated load 20,000 operations W: "W" shaped bracket	General Data		1L: One 'L' shaped mounting bracket						
Electrical life at rated load 20,000 operations W: "W" shaped bracket	Operate / bounce time at 20°C max.	60ms / 5ms	2L: Two 'L' shaped mounting brackets						
	Release time	60ms	2P: Two 'P' shaped mounting brackets						
Mechanical life operations 1 x 10 <sup>5</sup>	Electrical life at rated load	20,000 operations	W: "W" shaped bracket						
	Mechanical life operations	1 x 10 <sup>5</sup>							
Environmental NB: Mounting orientation:	Environmental		NB: Mounting orientation:						
Ambient temperature operating -25°C to +65°C (Latching), +85°C (non-Latching) The DSC30M may be mounted horizontally, but if mounted	Ambient temperature operating	-25°C to +65°C (Latching), +85°C (non-Latching)	The DSC30M may be mounted horizontally, but if mounted						
Shock resistance <4g, (60 ~ 100ops/min)	Shock resistance	≤4g, (60 ~ 100ops/min)	vertically, the coil should be positioned downwards.						
Vibration resistance     ≤3.0g sine peak (1 to 50Hz)     Magnetic latching types:       For latching types, ensure >200ms pulse length to allow	Vibration resistance	≤3.0g sine peak (1 to 50Hz)							
Relative humidity RH up to 98% at 20°C contacts to settle and magnetic circuit to be fully established.	Relative humidity RH	up to 98% at 20°C	contacts to settle and magnetic circuit to be fully established.						
Dimensions L x W x H 60.7 x 48 x 123.3 mm (see Figs. 1 & 2)	Dimensions L x W x H	60.7 x 48 x 123.3 mm (see Figs. 1 & 2)	Long term continuous coil energizing is not permitted.						
Weight approx. 800g (depends on options)	Weight approx.	800g (depends on options)							

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## JURAKOOL

## **DSC30M** series LVDC Contactor 300A / 120VDC

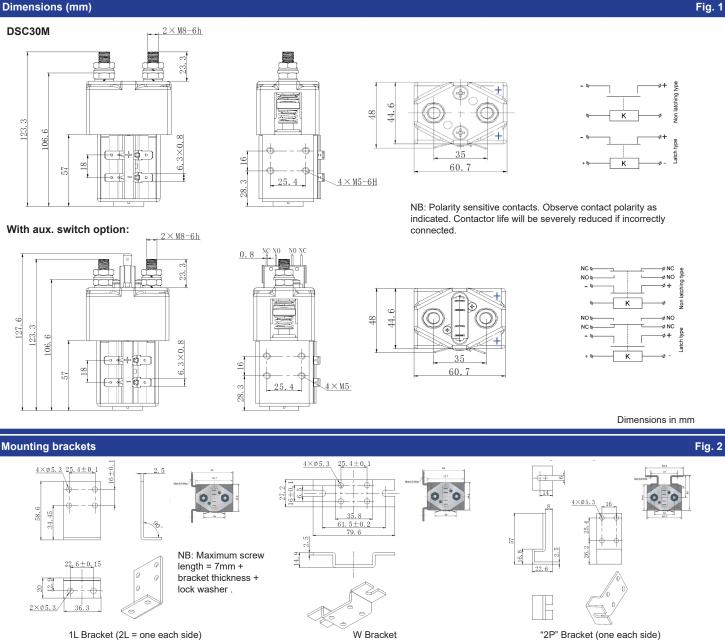
DC Coil Data - DSC3	0M Standard (Mono-s	stable, non latching)				Table 1
Coil code	Nominal voltage (VDC) U₅	Coil working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Coil power dissipation (W)	Holding current (A)
1012	12		8.4	1.2	10 ~ 20	≤1.2
1024	24	0.85U <sub>s</sub> ~ 1.1U <sub>s</sub>	16.8	2.4	10 ~ 20	≤0.6
1048	48	0.030s ~ 1.10s	33.6	4.8	10 ~ 20	≤0.3
1060	60		42.0	6.0	10 ~ 20	≤0.25

## DC Coil Data - DSC30M Bi-stable, magnetic latching

DC Coil Data - DSC3	0M Bi-stable, magnet	tic latching				Table 2
Coil code	Nominal voltage (VDC) U <sub>s</sub>	Coil working voltage range (V)	Must operate voltage max. (VDC)	Must release voltage min. (VDC)	Coil power dissipation (W)	Coil power (W)
SL12	12		2.4 ~ 9.6	2.4 ~ 9.6	15 ~ 30	Initial
SL24	24	0.85U₅ ~ 1.1U₅	4.8 ~ 19.2	4.8 ~ 19.2	15 ~ 30	15~35W
SL48	48		9.6 ~ 38.4	9.6 ~ 38.4	15 ~ 30	Pulse length
SL60	60		12.0 ~ 48.0	12.0 ~ 48.0	15 ~ 30	~1 sec

Other coils available upon special request. MOQ's will apply.

## **Dimensions (mm)**



DSC30M 032922JHM

Specifications are subject to change without notice. E&OE