



Submittal Data Information

S-Flex™ Enclosed Drive

301-1895

EFFECTIVE: AUGUST 1, 2011

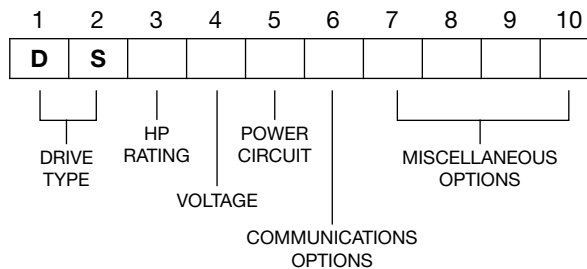
SUPERSEDES: JUNE 1, 2011

JOB _____ ENGINEER _____

CONTRACTOR _____ REP. _____

ITEM NO.	MODEL NO.	HP/KW.	SUPPLY VOLTAGE	WEIGHT	
	OPTION	OPTION	OPTION	OPTION	

S-FLEX PART NUMBERS:



(1-2) DRIVE TYPE

DS	S-FLEX DRIVE
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(3) HP RATING

C	1
D	2
E	3
F	5
G	7.5
H	10
J	15
K	20
L	25
M	30
N	40
P	50
Q	60
R	75
S	100

(4) VOLTAGE

2	208 V
3	230 V
4	460 V

(5) POWER CIRCUIT

W	WITHOUT BYPASS
Y	BYPASS

(6) COMMUNICATIONS OPTIONS

B	LonWorks
0	BACnet MSTP/ Metasys N2/ Apogee FLN P1/ Modbus Control (Field Configurable)

(7-10) MISCELLANEOUS OPTIONS

A	Line Isolation Switch
B	Line Contactor
S	Seismic Qualification
0	NONE



In order to provide the most efficient pump solution to our customers, Taco is now working with Schneider Electric.

This collaboration brings together Taco's pump technology with Schneider Electric Variable Frequency Drives and the drive packaging of Square D enclosures to offer the best overall pumping solution for our customers.



SELECTION GUIDE FOR STANDARD OFFERING:

208 V	HP	Full Load	Height		Width		Depth		Weight	
Catalog Number		A	in.	mm	in.	mm	in.	mm	lbs	kgs
DSC2Y00	1	4.6	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSD2Y00	2	7.5	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSE2Y00	3	10.6	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSF2Y00	5	16.7	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSG2Y00	7.5	24.2	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSH2Y00	10	30.8	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSJ2Y00	15	46.2	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSK2Y00	20	59.2	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSL2Y00	25	74.8	45.142	1146.6	12.215	310.3	8.727	221.6	111	50.349
DSM2Y00	30	88	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSN2Y00	40	114	64.900	1648.5	15.243	387.5	11.915	302.7	206	93.440

230 V	HP	Full Load	Height		Width		Depth		Weight	
Catalog Number		A	in.	mm	in.	mm	in.	mm	lbs	kgs
DSC3Y00	1	4.2	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSD3Y00	2	6.8	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSE3Y00	3	9.6	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSF3Y00	5	15.2	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSG3Y00	7.5	22	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSH3Y00	10	28	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSJ3Y00	15	42	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSK3Y00	20	54	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSL3Y00	25	68	45.142	1146.6	12.215	310.3	8.727	221.6	111	50.349
DSM3Y00	30	80	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSN3Y00	40	104	64.900	1648.5	15.243	387.2	11.915	302.7	206	93.440

460 V	HP	Full Load	Height		Width		Depth		Weight	
Catalog Number		A	in.	mm	in.	mm	in.	mm	lbs	kgs
DSC4Y00	1	2.1	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSD4Y00	2	3.4	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSE4Y00	3	4.8	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSF4Y00	5	7.6	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSG4Y00	7.5	11	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSH4Y00	10	14	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSJ4Y00	15	21	40.375	1025.5	8.714	221.3	7.895	200.5	52	23.587
DSK4Y00	20	27	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSL4Y00	25	34	45.142	1146.6	12.215	310.3	8.725	221.6	111	50.349
DSM4Y00	30	40	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSN4Y00	40	52	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSP4Y00	50	65	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSQ4Y00	60	77	62.006	1575.0	12.532	318.3	10.916	277.3	140	63.503
DSR4Y00	75	96	64.900	1648.5	15.243	387.2	11.915	302.7	206	93.440
DSS4Y00	100	124	64.900	1648.5	15.243	387.2	11.915	302.7	206	93.440

SPECIFICATIONS:

Electrical Specifications	
Input voltage	208 Vac $\pm$ 10%, 230 Vac $\pm$ 10%, 460 Vac $\pm$ 10%
Displacement power factor	Approximately 0.96
Input frequency	60 Hz $\pm$ 5%
Output voltage	Three-phase output, maximum voltage equal to input voltage
Galvanic isolation	Galvanic isolation between power and control (inputs, outputs and power supplies)
Frequency range of the power converter	0.1 Hz to 500 Hz (factory setting of 60 Hz maximum)
Current limit	150% of nominal drive full load amperage (FLA) for 60 s
Switching frequency	Selectable from 2 kHz to 16 kHz (1)
Speed reference	AI1: 0 V to +10 V, Impedance = 30 kOhms, AI3: 4 mA to 20 mA, Impedance = 250 kOhms 0 mA to 20 mA (reassignable, X-Y range with keypad display) Manual speed control via keypad
Frequency resolution in analog reference	0.1 Hz to 100 Hz (10 bits)
Speed regulation	V/f: determined by motor slip, typically 3% SLFV (sensorless flux vector): 1%
Efficiency	Typically greater than 95%
Inputs and outputs	3 Multi-function programmable Logic Inputs 2 Analog inputs; VIA (4 mA to 20 mA or 0 V to 10 V), VIB (0 V to 10 V) 1 Analog output; X mA to Y mA or 0 V to 10 V, software selectable 2 Assignable output relays; 1 fault relay, 1 assignable relay 1 RJ45 RS485 Modbus port
Acceleration and deceleration ramps	0.1 s to 999.9 s (adjustable in 0.1 s increments)
Motor protection	Class 10 and Class 20 overload protection with bypass in addition to controller internal electronic thermal protection
Keypad display	Self-diagnostics with fault messages in three languages. Also refer to instruction manual, 30072-451-61

Environmental Specifications	
Storage temperature	-13° F to +158° F (-25° C to +70° C) with vent cover removed and without derating
Operating temperature	+14° F to +104° F (-10° C to +40° C)
Humidity	95% with no condensation or dripping water, conforming to IEC 60068-2-3
Altitude	3300 ft (100 m) maximum without derating; derate the current by 1% for each additional 330 ft (100 m)
Enclosure	Type 1
Pollution degree	Pollution degree 2 per NEMA ICS-1 and IEC 60664-1
Resistance to vibrations (power converter only)	According to IEC 60068-2-6: 1.5 mm zero to peak from 3 Hz to 13 Hz 1 g from 13 Hz to 150 Hz
Resistance to shocks (power converter only)	According to IEC 60068-2 15 g, 11 ms
Transit test to shock	Conforming to National Safe Transit Association and International Safe Transit Association test for packaging weighing 100 lbs or less
Codes and standards	UL listed per UL 508C as incorporating Class 10 and Class 20 electronic and electromechanical overload protection. Conforms to applicable NEMA ICS, NFPA, IEC and ISO 9001 standards

Accessories Catalog Numbers	
Modbus Cable for PCSoft	VW3A8106
EZ-M mounting channel, 72 in. length	EZM72MC
LonWorks communication card for field mounting	VW3A21312

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