



# MITCHELL CONTROLS CATALOG

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### OOB Danfoss FC202 IP21 Nema 1 VFDs

#### Single Phase

Nema 1 VFD, 1Ø Input, 3Ø Output, 230 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131G5531	5	16.7	18.9" X 9.5" X 10.3"	50.7	B1
131H8048	7.5	24.2	18.9" X 9.5" X 10.3"	50.7	B1
131H8049	10	30.8	25.6" X 9.5" X 10.2"	59.5	B2
134G0778	20	59.4	26.8" X 12.1" X 12.2"	99.2	C1
134F9796	30	88	30.3" X 14.6" X 13.2"	143.3	C2

Nema 1 VFD, 1Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131G2905	10	15	18.9" X 9.5" X 10.3"	50.7	B1
134G2205	15	21	25.6" X 9.5" X 10.3"	59.5	B2
134G3979	25	34	26.8" X 12.1" X 12.2"	99.2	C1
134G3980	50	65	30.3" X 14.6" X 13.2"	143.3	C2

#### Three Phase

Nema 1 VFD, 3Ø Input, 3Ø Output, 230 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131H8714	5	16.7	10.6" X 5.1" X 8.1"	16.5	A3
131B9225	7.5	24.2	18.9" X 9.5" X 10.3"	50.7	B1
131B9238	10	30.8	18.9" X 9.5" X 10.3"	50.7	B1
131B9256	15	46.2	18.9" X 9.5" X 10.3"	50.7	B1
131B9265	20	59.4	25.6" X 9.5" X 10.3"	59.5	B2
131B9273	25	74.8	26.8" X 12.1" X 12.2"	99.2	C1
131B9282	30	88	26.8" X 12.1" X 12.2"	99.2	C1
131B9289	40	115	26.8" X 12.1" X 12.2"	143.3	C1
131B9314	50	143	30.3" X 14.6" X 13.2"	143.3	C2
131B9326	60	170	30.3" X 14.6" X 13.2"	143.3	C2

Smaller sizes available upon request

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

Pricing throughout is in U.S. dollars

**OOB Danfoss FC202 IP21 Nema 1 VFDs**

**Three Phase**

Nema 1 VFD, 3Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131F8616	5	8.2	10.6" X 3.5" X 8.1"	12.2	A2
131F7943	7.5	11	10.6" X 5.1" X 8.1"	16.5	A3
131F0988	10	14.5	10.6" X 5.1" X 8.1"	16.5	A3
131B9531	15	21	18.9" X 9.5" X 10.3"	50.7	B1
131B9004	20	27	18.9" X 9.5" X 10.3"	50.7	B1
131B9011	25	34	18.9" X 9.5" X 10.3"	50.7	B1
131B9019	30	40	25.6" X 9.5" X 10.3"	59.5	B2
131B9034	40	52	25.6" X 9.5" X 10.3"	59.5	B2
131B9041	50	65	26.8" X 12.1" X 12.2"	99.2	C1
131B9048	60	80	26.8" X 12.1" X 12.2"	99.2	C1
131B9056	75	105	26.8" X 12.1" X 12.2"	99.2	C1
131B9066	100	130	30.3" X 14.6" X 13.2"	143.3	C2
131B9073	125	160	30.3" X 14.6" X 13.2"	143.3	C2
134F0367	150	190	33.7" X 12.8" X 14.9"	125.3	D1h
134F0369	200	240	33.7" X 12.8" X 14.9"	125.3	D1h
134F4174	250	302	33.7" X 12.8" X 14.9"	125.3	D1h
134F4179	300	361	41.7" X 16.5" X 14.9"	275.7	D2h
134F4184	350	443	41.7" X 16.5" X 14.9"	275.7	D2h
134F4189	450	540	78.7" X 23.6" X 19.4"	275.7	D2h
135X4361	500	590	78.7" X 23.6" X 19.4"	594.7	E1h
135X6486	550	678	78.7" X 23.6" X 19.4"	594.7	E1h
135U2862	600	730	78.7" X 23.6" X 19.4"	594.7	E1h
136H9121	650	780	80.4" X 27.5" X 19.4"	700	E2h
135X4639	750	890	80.4" X 27.5" X 19.4"	700	E2h

Smaller sizes available upon request

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Galvanized Steel Backplates for Nema 1, 3R		
Part Number	Size Code	Notes
130B3150	A4	
130B1098	A5	
130B3383	B1	
130B3397	B2	
130B4172	B4	
130B3910	C1	
130B3911	C2	
131X2868	C3	
130B4171	C4	

### OOB Nema 1 Accessories Selection Guide

Note: Nema 1 OOB Quick Quote lists common loose option for corresponding drive.

#### Single Phase

Nema 1 VFD, 1Ø Input, 3Ø Output, 230 VAC						
Drive Part Number	HP	AMP	TVSS in Nema 1 Enclosure	Line Reactor in Nema 1	DV/DT Filter in Nema 1	Sinewave Filter in Nema 1
131G5531	5	16.7	TVSS 240-005-060-N4	KDRD21HE01	V1K16A01	MSD0016B300
131H8048	7.5	24.2	TVSS 240-005-060-N4	KDRD22HE01	V1K25A01	MSD0022B300
131H8049	10	30.8	TVSS 240-005-060-N4	KDRC22HE01	V1K35A01	MSD0028B300
134G0778	20	59.4	TVSS 240-005-060-N4	KDRF26HE01	V1K55A01	MSD0054B300
134F9796	30	88	TVSS 240-005-060-N4	KDRH23HE01	V1K80A01	MSD0080B300

Nema 1 VFD, 1Ø Input, 3Ø Output, 480 VAC							
Drive Part Number	HP	AMP	TVSS in Nema 1 Enclosure	Line Reactor in Nema 1	Load Reactor in Nema 1	DV/DT Filter in Nema 1	Sinewave Filter in Nema 1
131G2905	10	15	TVSS 480-005-125-N4	KDRC1HE01	KDRB1PE01	V1K18A01	MSD0016A300
136G7491	15	21	TVSS 480-005-125-N4	KDRE2HE01	KDRD1PE01	V1K25A01	MSD0023A300
134G3979	25	34	TVSS 480-005-125-N4	KDRF1HE01	KDRD3PE01	V1K35A01	MSD0035A300
134G3980	50	65	TVSS 480-005-125-N4	KDRG3HE01	KDRF1PE01	V1K80A01	MSD0065A300

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

#### Three Phase

Nema 1 VFD, 3Ø Input, 3Ø Output, 230 VAC						
Drive Part Number	HP	AMP	TVSS in Nema 1/4 Enclosure	Line Reactor in Nema 1	DV/DT Filter in Nema 1	Sinewave Filter in Nema 1/3R
131H8714	5	16.7	TVSS 240-005-060-N4	KDRB25HE01	V1K16A01	MSD0016B300
131B9225	7.5	24.2	TVSS 240-005-060-N4	KDRB26HE01	V1K25A01	MSD0022B300
131B9238	10	30.8	TVSS 240-005-060-N4	KDRD21HE01	V1K35A01	MSD0028B300
131B9256	15	46.2	TVSS 240-005-060-N4	KDRD22HE01	V1K45A01	MSD0042B300
131B9265	20	59.4	TVSS 240-005-060-N4	KDRC22HE01	V1K55A01	MSD0054B300
131B9273	25	74.8	TVSS 240-005-060-N4	KDRF28HE01	V1K80A01	MSD0068B300
131B9282	30	88	TVSS 240-005-060-N4	KDRF25HE01	V1K80A01	MSD0080B300
131B9289	40	115	TVSS 240-005-060-N4	KDRF26HE01	V1K110A01	MSD0104B300
131B9314	50	143	TVSS 240-005-060-N4	KDRH24HE01	V1K130A01	MSD0130B300
131B9326	60	170	TVSS 240-005-060-N4	KDRH23HE01	V1K160A01	MSD0154B300

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**OOB Nema 1 Accessories Selection Guide (continued)**

**Three Phase**

Nema 1 VFD, 3Ø Input, 3Ø Output, 480 VAC								
Drive Part Number	HP	AMP	TVSS in Nema 1/4 Enclosure	Line Reactor in Nema 1	IEEE-519 Filter in Nema 1	Load Reactor in Nema 1	DV/DT Filter in Nema 1	Sinewave Filter in Nema 1/3R
131F8616	5	8.2	TVSS 480-005-125-N4	KDRAA3H2E01	HSD0005AW11000	KDRA3PE01	V1K8A01	MSD0009A300
131F7943	7.5	11	TVSS 480-005-125-N4	KDRAA4H2E01	HSD0008AW11000	KDRA4PE01	V1K12A01	MSD0012A300
131F0988	10	14.5	TVSS 480-005-125-N4	KDRAA5H2E01	HSD0010AW11000	KDRB1PE01	V1K18A01	MSD0016A300
131B9531	15	21	TVSS 480-005-125-N4	KDRB2HE01	HSD0015AW11000	KDRD1PE01	V1K25A01	MSD0023A300
131B9004	20	27	TVSS 480-005-125-N4	KDRC3HE01	HSD0020AW11000	KDRD2PE01	V1K27A01	MSD0030A300
131B9011	25	34	TVSS 480-005-125-N4	KDRC1HE01	HSD0025AW11000	KDRD3PE01	V1K35A01	MSD0035A300
131B9019	30	40	TVSS 480-005-125-N4	KDRE2HE01	HSD0030AW11000	KDRD4PE01	V1K45A01	MSD0045A300
131B9034	40	52	TVSS 480-005-125-N4	KDRF4HE01	HSD0040AW11000	KDRC1PE01	V1K55A01	MSD0055A300
131B9041	50	65	TVSS 480-005-125-N4	KDRF1HE01	HSD0050AW11000	KDRF1PE01	V1K80A01	MSD0065A300
131B9048	60	80	TVSS 480-005-125-N4	KDRF2HE01	HSD0060AW11000	KDRF2PE01	V1K80A01	MSD0080A300
131B9056	75	105	TVSS 480-005-125-N4	KDRH2HE01	HSD0075AW11000	KDRF3PE01	V1K110A01	MSD0110A300
131B9066	100	130	TVSS 480-005-125-N4	KDRI2HE01	HSD0100AW11000	KDRH1PE01	V1K130A01	MSD0130A300
131B9073	125	160	TVSS 480-005-125-N4	KDRG3HE01	HSD0125AW11000	KDRI1PE01	V1K160A01	MSD0160A300
134F0367	150	190	TVSS 480-150-600-N4	KDRG1HE01	HSD0150AW11000	KDRI2PE01	V1K200A01	MSD0200A300
134F0369	200	240	TVSS 480-150-600-N4	KDRJ1HE01	HSD0200AW11000	KDRG1PE01	V1K250A01	MSD0250A300
134F4174	250	302	TVSS 480-150-600-N4	KDRL1HE01	HSD0250AW11000	KDRJ1PE01	V1K305A01	MSD0305A300

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**OOB Nema 1 Accessories Selection Guide (continued)**

**Three Phase**

Nema 1 VFD, 3Ø Input, 3Ø Output, 480 VAC									
Drive Part Number	HP	AMP	Drive List	TVSS in Nema 1/4 Enclosure	Line Reactor in Nema 1	IEEE-519 Filter in Nema 1	Load Reactor in Nema 1	DV/DT Filter in Nema 1	Sinewave Filter in Nema 1/3R
134F4179	300	361	TVSS 480-150-600-N4	KDRL2HE01	HSD0300AW11000	KDRJ2PE01	V1K362A01	MSD0362A300	
134F4184	350	443	TVSS 480-150-600-N4	KDRL3HE01	HSD0350AW11000	KDRL1PE01	V1K420A01	MSD0420A300	
134F4189	450	540	TVSS 480-150-600-N4	KDRL5HE01	HSD0450AW11000	KDRL3PE01	V1K600A01	MSN0540A300	
135X4361	500	590	TVSS 480-150-600-N4	KDRL6HE01	HSD0500AW11000	KDRL4PE01	V1K600A01	MSN0600A300	

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**OOB Danfoss FC202 IP66 Nema 4X VFDs**

**Single Phase**

Nema 4X VFD, 1Ø Input, 3Ø Output, 230 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131Z2815	5	16.7	18.9" X 9.5" X 10.3"	50.7	B1
131X7986	7.5	24.2	18.9" X 9.5" X 10.3"	50.7	B1
131Z1648	10	30.8	25.6" X 9.5" X 10.2"	59.5	B2
134H0835	20	59.4	26.8" X 12.1" X 12.2"	99.2	C1
134H8284	30	88	30.3" X 14.6" X 13.2"	143.3	C2

Nema 4X VFD, 1Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131Z3884	10	15	18.9" X 9.5" X 10.3"	50.7	B1
134H6623	15	21	25.6" X 9.5" X 10.3"	59.5	B2
134H6576	25	34	26.8" X 12.1" X 12.2"	99.2	C1
134G3812	50	65	30.3" X 14.6" X 13.2"	143.3	C2

**Three Phase**

Nema 4X VFD, 3Ø Input, 3Ø Output, 230VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131Z0485	5	16.7	10.6" X 5.1" X 8.1"	16.5	A3
131Z1791	7.5	24.2	18.9" X 9.5" X 10.3"	50.7	B1
131Z2737	10	30.8	18.9" X 9.5" X 10.3"	50.7	B1
131Z3886	15	46.2	18.9" X 9.5" X 10.3"	50.7	B1
131X9095	20	59.4	25.6" X 9.5" X 10.3"	59.5	B2
131B9535	25	74.8	26.8" X 12.1" X 12.2"	99.2	C1
131B9536	30	88	26.8" X 12.1" X 12.2"	99.2	C1
131B9537	40	115	26.8" X 12.1" X 12.2"	143.3	C1
131B9538	50	143	30.3" X 14.6" X 13.2"	143.3	C2
131B9540	60	170	30.3" X 14.6" X 13.2"	143.3	C2

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**Three Phase**

Nema 4X VFD, 3Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131X4502	5	8.2	10.6" X 3.5" X 8.1"	12.2	A2
131X7797	7.5	11	10.6" X 5.1" X 8.1"	16.5	A3
131X9647	10	14.5	10.6" X 5.1" X 8.1"	16.5	A3
131X8616	15	21	18.9" X 9.5" X 10.3"	50.7	B1
131X9274	20	27	18.9" X 9.5" X 10.3"	50.7	B1
131X9035	25	34	18.9" X 9.5" X 10.3"	50.7	B1
131X9036	30	40	25.6" X 9.5" X 10.3"	59.5	B2
131Z2140	40	52	25.6" X 9.5" X 10.3"	59.5	B2
131F3066	50	65	26.8" X 12.1" X 12.2"	99.2	C1
131B9532	60	80	26.8" X 12.1" X 12.2"	99.2	C1
131B9533	75	105	26.8" X 12.1" X 12.2"	99.2	C1
131B9534	100	130	30.3" X 14.6" X 13.2"	143.3	C2
131B9530	125	160	30.3" X 14.6" X 13.2"	143.3	C2

Smaller sizes available upon request

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304 Stainless Steel Backplates for Nema 4X		
Part Number	Size Code	Notes
130B3158	A4	Stainless Steel Backplate for A4 Frame drives
130B3242	A5	Stainless Steel Backplate for A5 Frame drives
130B3434	B1	Stainless Steel Backplate for B1 Frame drives
130B3465	B2	Stainless Steel Backplate for B2 Frame drives
130B3468	C1	Stainless Steel Backplate for C1 Frame drives
130B3491	C2	Stainless Steel Backplate for C2 Frame drives
130B4598	A4, A5, B1, & B2	Weathershield for A4, A5, B1, & B2 Frame drives
130B4597	C1 & C2	Weathershield for C1 & C2 Frame drives

**OOB Nema 3R Quick Quote**

**Note:** Nema 3R OOB Quick Quote lists common loose option for corresponding drive.

**Single Phase**

Nema 4X VFD, N3R Options 1Ø Input, 3Ø Output, 230 VAC						
Drive Part Number	HP	AMP	TVSS in Nema 4 Enclosure	Line Reactor in Nema 3R	DV/DT Filter in Nema 3R	Sinewave Filter in Nema 3R
131Z2815	5	16.7	TVSS 240-005-060-N4	KDRD-21HE3R	V1K16A03	MSD0016B300
131X7986	7.5	24.2	TVSS 240-005-060-N4	KDRD-22HE3R	V1K25A03	MSD0022B300
131Z1648	10	30.8	TVSS 240-005-060-N4	KDRC22H-E3R	V1K35A03	MSD0028B300
134H0835	20	59.4	TVSS 240-005-060-N4	KDRF-26HE3R	V1K55A03	MSD0054B300
134H8284	30	88	TVSS 240-005-060-N4	KDRH-23HE3R	V1K80A03	MSD0080B300

**Single Phase**

Nema 4X VFD, 1Ø Input, 3Ø Output, 480 VAC N3R Options							
Drive Part Number	HP	AMP	TVSS in Nema 4 Enclosure	Line Reactor in Nema 3R	Load Reactor in Nema 3R	DV/DT Filter in Nema 3R	Sinewave Filter in Nema 3R
131Z3884	10	15	TVSS 480-005-125-N4	KDRC1HE3R	KDRB1PE03	V1K18A03	MS-D0016A300
134H6623	15	21	TVSS 480-005-125-N4	KDRE2HE3R	KDRD1PE03	V1K25A03	MS-D0023A300
134H6576	25	34	TVSS 480-005-125-N4	KDRF1HE3R	KDRD3PE03	V1K35A03	MS-D0035A300
134G3812	50	65	TVSS 480-005-125-N4	KDRG3HE3R	KDRF1PE03	V1K80A03	MS-D0065A300

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**Three Phase**

Nema 4X VFD, 3Ø Input, 3Ø Output, 230 VAC N3R Options						
Drive Part Number	HP	AMP	TVSS in Nema 4 Enclosure	Line Reactor in Nema 3R	DV/DT Filter in Nema 3R	Sinewave Filter in Nema 3R
131Z0485	5	16.7	TVSS 240-005-060-N4	KDRB-25HE3R	V1K16A03	MSD0016B300
131Z1791	7.5	24.2	TVSS 240-005-060-N4	KDRB-26HE3R	V1K25A03	MSD0022B300
131Z2737	10	30.8	TVSS 240-005-060-N4	KDRD-21HE3R	V1K35A03	MSD0028B300
131Z3886	15	46.2	TVSS 240-005-060-N4	KDRD-22HE3R	V1K45A03	MSD0042B300
131X9095	20	59.4	TVSS 240-005-060-N4	KDRC22H-E3R	V1K55A03	MSD0054B300
131B9535	25	74.8	TVSS 240-005-060-N4	KDRF-28HE3R	V1K80A03	MSD0068B300
131B9536	30	88	TVSS 240-005-060-N4	KDRF-25HE3R	V1K80A03	MSD0080B300
131B9537	40	115	TVSS 240-005-060-N4	KDRF-26HE3R	V1K110A03	MSD0104B300
131B9538	50	143	TVSS 240-005-060-N4	KDRH-24HE3R	V1K130A03	MSD0130B300
131B9540	60	170	TVSS 240-005-060-N4	KDRH-23HE3R	V1K160A03	MSD0154B300

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.



**OOB Nema 3R Quick Quote**

**Note:** Nema 3R OOB Quick Quote lists common loose option for corresponding drive.

**Three Phase**

NEMA 4X VFD, 3Ø Input, 3Ø Output, 480 VAC N3R Options								
Drive Part Number	HP	AMP	TVSS in Nema 4 Enclosure	Line Reactor in Nema 3R	IEEE-519 Filter in Nema 3R	Load Reactor in Nema 3R	DV/DT Filter in Nema 3R	Sinewave Filter in Nema 3R
131X4502	5	8.2	TVSS 480-005-125-N4	KDRAA3H2E3R	HSD0005AW31000	KDRA3PE3R	V1K8A03	MSD0009A300
131X7797	7.5	11	TVSS 480-005-125-N4	KDRAA4H2E3R	HSD0008AW31000	KDRA4PE3R	V1K12A03	MSD0012A300
131X9647	10	14.5	TVSS 480-005-125-N4	KDRAA5H2E3R	HSD0010AW31000	KDRB1PE3R	V1K18A03	MSD0016A300
131X8616	15	21	TVSS 480-005-125-N4	KDRB2HE3R	HSD0015AW31000	KDRD1PE3R	V1K25A03	MSD0023A300
131X9274	20	27	TVSS 480-005-125-N4	KDRC3HE3R	HSD0020AW31000	KDRD2PE3R	V1K27A03	MSD0030A300
131X9035	25	34	TVSS 480-005-125-N4	KDRC1HE3R	HSD0025AW31000	KDRD3PE3R	V1K35A03	MSD0035A300
131X9036	30	40	TVSS 480-005-125-N4	KDRE2HE3R	HSD0030AW31000	KDRD4PE3R	V1K45A03	MSD0045A300
131Z2140	40	52	TVSS 480-005-125-N4	KDRF4HE3R	HSD0040AW31000	KDRC1PE3R	V1K55A03	MSD0055A300
131F3066	50	65	TVSS 480-005-125-N4	KDRF1HE3R	HSD0050AW31000	KDRF1PE3R	V1K80A03	MSD0065A300
131B9532	60	80	TVSS 480-005-125-N4	KDRF2HE3R	HSD0060AW31000	KDRF2PE3R	V1K80A03	MSD0080A300
131B9533	75	105	TVSS 480-005-125-N4	KDRH2HE3R	HSD0075AW31000	KDRF3PE3R	V1K110A03	MSD0110A300
131B9534	100	130	TVSS 480-005-125-N4	KDRI2HE3R	HSD0100AW31000	KDRH1PE3R	V1K130A03	MSD0130A300
131B9530	125	160	TVSS 480-005-125-N4	KDRG3HE3R	HSD0125AW31000	KDRI1PE3R	V1K160A03	MSD0160A300

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**NEMA 1 and NEMA 3R reactor and filter options would be used in conjunction with a NEMA 1 drive for indoor applications and the NEMA 4X (IP66) drive when mounted outdoors.**

**Line Reactor:** The Danfoss FC202 drive has integrated DC link reactors that reduce the harmonic content of the drive equivalent to a 5% line reactor but without the resultant voltage drop. Under certain circumstances where high voltages are common or where there is a high harmonic content on the grid, the addition of a line reactor may reduce nuisance tripping and improve drive reliability.

Both the load reactor and DV/DT filter are typically used on all submersible pump applications where the voltage to the motor exceeds 380 volts, and the distance from the drive to the pump exceeds 50 ft.

**Load Reactor:** The addition of a Load Reactor unit to the output of a drive will dampen overshoot peak voltage, reduce motor heating and audible noise, helping to extend the life of the motor. Using a load reactor does not give you the predictable results that a DV/DT filter will and should only be used where drive to motor distances do not exceed 300 ft.

**DV/DT:** The addition of a DV/DT filter provides motor protection by limiting voltage spikes below 1,000 volts for long-lead applications. This will give you all the advantages of the load reactor at a slightly higher cost but with more predictable results. Though these are typically used only for submersible motors, any motor can benefit from its use where the distances from drive to motor exceeds 300-1000 ft.

**Harmonic Filters:** The Danfoss drive, because of its integrated DC link reactors, has an industry low harmonic footprint, not requiring additional mitigation unless required by the utility. The standard most sited is IEEE-519, which will require additional harmonic mitigation. In those cases, we will either integrate a passive harmonic filter into the control panel or supply a NEMA 3R filter to be installed by the customer adjacent to the drive. Integration has the least impact on the customer in terms of field installation, but comes at a cost as the horsepower increases.

**Sinewave:** A Sinewave filter provides superior motor protection by limiting voltage spikes below 1,000 volts for extremely long-lead applications. Though these are typically used only for submersible motors, any motor can benefit from its use where the distances from drive to motor exceeds 1000 ft.

### OOB Nema 1 Input Filters

#### Three Phase

5% Nema 1 Input Line Reactor, 3Ø, 240 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRB25HE01	5HP	17	240	12.25" x 12.5" x 6.75" Wall Mount	18.5
KDRB26HE01	7.5HP	26	240	12.25" x 12.5" x 6.75" Wall Mount	18.5
KDRD21HE01	10HP	31	240	12.25" x 12.5" x 6.75" Wall Mount	22.5
KDRD22HE01	15HP	47	240	12.25" x 12.5" x 6.75" Wall Mount	22.5
KDRC22HE01	20HP	62	240	12.25" x 12.5" x 6.75" Wall Mount	25.5
KDRF28HE01	25HP	75	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRF25HE01	30HP	92	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRF26HE01	40HP	114	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRH24HE01	50HP	143	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	70
KDRH23HE01	60HP	169	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	81

5% Nema 1 Input Line Reactor, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRAA3H2E01	5HP	8.2	480	12.25" X 12.5" X 6.75" Wall Mount	19
KDRAA4H2E01	7.5HP	12	480	12.25" X 12.5" X 6.75" Wall Mount	20
KDRAA5H2E01	10HP	14	480	12.25" X 12.5" X 6.75" Wall Mount	20
KDRB2HE01	15HP	27	480	12.25" X 12.5" X 6.75" Wall Mount	22
KDRC3HE01	20HP	27	480	12.25" X 12.5" X 6.75" Wall Mount	30
KDRC1HE01	25HP	35	480	12.25" X 12.5" X 6.75" Wall Mount	30
KDRE2HE01	30HP	45	480	12.25" X 12.5" X 6.75" Wall Mount	31
KDRF4HE01	40HP	60	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRF1HE01	50HP	85	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRF2HE01	60HP	77	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRH2HE01	75HP	100	480	19" X 15.5" X 15.5" Wall/Floor Mount	82
KDR12HE01	100HP	125	480	19" X 15.5" X 15.5" Wall/Floor Mount	82
KDRG3HE01	125HP	160	480	22" X 20.5" X 24.5" Wall/Floor Mount	127
KDRG1HE01	150HP	185	480	22" X 20.5" X 24.5" Wall/Floor Mount	127
KDRJ1HE01	200HP	240	480	22" X 20.5" X 24.5" Wall/Floor Mount	136
KDRL1HE01	250HP	310	480	22" X 20.5" X 24.5" Wall/Floor Mount	162
KDRL2HE01	300HP	365	480	22" X 20.5" X 24.5" Wall/Floor Mount	162
KDRL3HE01	350HP	435	480	22" X 20.5" X 24.5" Wall/Floor Mount	166
KDRL4HE01	400HP	480	480	22" X 20.5" X 24.5" Wall/Floor Mount	176
KDRL5HE01	450HP	540	480	36" x 28.39"x 30.19" Floor Mount	295
KDRL6HE01	500HP	590	480	36" x 28.39"x 30.19" Floor Mount	295

**OOB Nema 1 Input Filters (continued)**

**Three Phase**

<b>NEMA 1 Harmonic Filter, 3Ø, 480 VAC</b>					
<b>Part Number</b>	<b>Size</b>	<b>Amp</b>	<b>Voltage</b>	<b>Dimensions</b>	<b>Ship'g Wt (lbs)</b>
HSD0005AW11000	5HP	8	480	19" X 15.5" X 19.5" Wall Mount	63
HSD0008AW11000	7.5HP	12	480	19" X 15.5" X 19.5" Wall Mount	80
HSD0010AW11000	10HP	16	480	19" X 15.5" X 19.5" Wall Mount	80
HSD0015AW11000	15HP	23	480	22" X 20.5" X 28.5" Wall Mount	88
HSD0020AW11000	20HP	31	480	22" X 20.5" X 28.5" Wall Mount	93
HSD0025AW11000	25HP	38	480	22" X 20.5" X 28.5" Wall Mount	95
HSD0030AW11000	30HP	49	480	22" X 20.5" X 28.5" Wall Mount	105
HSD0040AW11000	40HP	62	480	36" X 28.5" X 37" Wall Mount	146
HSD0050AW11000	50HP	73	480	36" X 28.5" X 37" Wall Mount	146
HSD0060AW11000	60HP	87	480	36" X 28.5" X 37" Wall Mount	188
HSD0075AW11000	75HP	105	480	36" X 28.5" X 37" Wall Mount	189
HSD0100AW11000	100HP	140	480	36" X 28.5" X 37" Wall Mount	238
HSD0125AW11000	125HP	170	480	36" X 28.5" X 37" Wall Mount	305
HSD0150AW11000	150HP	209	480	36" X 28.4" X 36.86" Wall Mount	350
HSD0200AW11000	200HP	257	480	56" X 40.6" X 48.5" Floor Mount	510
HSD0250AW11000	250HP	321	480	56" X 40.6" X 48.5" Floor Mount	512
HSD0300AW11000	300HP	405	480	56" X 40.6" X 48.5" Floor Mount	780
HSD0350AW11000	350HP	445	480	56" X 40.6" X 48.5" Floor Mount	819
HSD0400AW11000	400HP	483	480	56" X 40.6" X 48.5" Floor Mount	975
HSD0450AW11000	450HP	540	480	56" X 40.6" X 48.5" Floor Mount	1130
HSD0500AW11000	500HP	637	480	56" X 40.6" X 48.5" Floor Mount	1140

**OOB Nema 1 Output Filters**

*Three Phase*

1.5% NEMA 1 Output Line Reactor, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRAA3L2E01	5HP	8	480	12.25 X 12.5 X 6.75	14.5
KDRAA4L2E01	7.5HP	12	480	12.25 X 12.5 X 6.75	14.5
KDRB1PE01	10HP	16	480	12.25 X 12.5 X 6.75	17.5
KDRD1PE01	15HP	21	480	12.25 X 12.5 X 6.75	20.5
KDRD2PE01	20HP	27	480	12.25 X 12.5 X 6.75	20.5
KDRD3PE01	25HP	35	480	12.25 X 12.5 X 6.75	20.5
KDRD4PE01	30HP	45	480	12.25 X 12.5 X 6.75	20.5
KDRC1PE01	40HP	55	480	12.25 X 12.5 X 6.75	25.5
KDRF1PE01	50HP	80	480	19.13 X 15.43 X 15.43	67
KDRF2PE01	60HP	80	480	19.13 X 15.43 X 15.43	67
KDRF3PE01	75HP	110	480	19.13 X 15.43 X 15.43	67
KDRH1PE01	100HP	130	480	19.13 X 15.43 X 15.43	77
KDRI1PE01	125HP	160	480	19.13 X 15.43 X 15.43	86
KDRI2PE01	150HP	200	480	19.13 X 15.43 X 15.43	111
KDRG1PE01	200HP	250	480	19.13 X 15.43 X 15.43	131
KDRJ1PE01	250HP	310	480	19.13 X 15.43 X 15.43	136
KDRJ2PE01	300HP	365	480	19.13 X 15.43 X 15.43	136
KDRL1PE01	350HP	420	480	19.13 X 15.43 X 15.43	151
KDRL2PE01	400HP	480	480	19.13 X 15.43 X 15.43	161
KDRL3PE01	450HP	550	480	19.13 X 15.43 X 15.43	166
KDRL4PE01	500HP	600	480	19.13 X 15.43 X 15.43	166

NEMA 1 DV/DT Filter, 3Ø, 240 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
V1K16A01	5HP	16	240	9.00 x 5.50 x 10.00	15
V1K25A01	7.5HP	25	240	9.00 x 5.50 x 10.00	15
V1K35A01	10HP	35	240	12.00 x 8.00 x 11.50	23
V1K45A01	15HP	45	240	12.00 x 8.00 x 11.50	23
V1K55A01	20HP	55	240	12.00 x 8.00 x 11.50	23
V1K80A01	25 - 30HP	80	240	12.00 x 8.00 x 11.50	29
V1K110A01	40HP	110	240	16.50 x 18.00 x 15.00	68
V1K130A01	50HP	130	240	16.50 x 18.00 x 15.00	83
V1K160A01	60HP	160	240	16.50 x 18.00 x 15.00	83
V1K200A01	75	200	240	16.50 x 18.00 x 15.00	93
V1K250A01	100	250	240	16.50 x 18.00 x 15.00	93
V1K362A01	125	362	240	16.50 x 18.00 x 30.00	117

**OOB Nema 1 Output Filters (continued)**

*Three Phase*

NEMA 1 DV/DT FILTER, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
V1K8A01	5HP	8	480	9.00 x 5.50 x 10.00	11
V1K12A01	7.5HP	12	480	9.00 x 5.50 x 10.00	11
V1K18A01	10HP	18	480	9.00 x 5.50 x 10.00	15
V1K25A01	15HP	25	480	9.00 x 5.50 x 10.00	15
V1K27A01	20HP	27	480	9.00 x 5.50 x 10.00	15
V1K35A01	25HP	35	480	12.00 x 8.00 x 11.50	23
V1K45A01	30HP	45	480	12.00 x 8.00 x 11.50	23
V1K55A01	40HP	55	480	12.00 x 8.00 x 11.50	23
V1K80A01	50 - 60HP	80	480	12.00 x 8.00 x 11.50	29
V1K110A01	75HP	110	480	16.50 x 18.00 x 15.00	68
V1K130A01	100HP	130	480	16.50 x 18.00 x 15.00	83
V1K160A01	125HP	160	480	16.50 x 18.00 x 15.00	83
V1K200A01	150HP	200	480	16.50 x 18.00 x 15.00	93
V1K250A01	200HP	250	480	16.50 x 18.00 x 15.00	93
V1K305A01	250HP	305	480	16.50 x 18.00 x 30.00	117
V1K362A01	300HP	362	480	16.50 x 18.00 x 30.00	117
V1K420A01	350HP	420	480	16.50 x 18.00 x 30.00	132
V1K480A01	400HP	480	480	16.50 x 18.00 x 30.00	138
V1K600A01	500HP	600	480	16.50 x 18.00 x 30.00	168

NEMA 1/3R SINEWAVE FILTER, 3Ø, 240 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
MSD0016B300	5HP	16	240	19.13 x 15.5 x 19.5	75
MSD0022B300	7.5HP	22	240	19.13 x 15.5 x 19.5	90
MSD0028B300	10HP	28	240	19.13 x 15.5 x 19.5	105
MSD0042B300	15HP	42	240	22.13 x 20.43 x 28.5	162
MSD0054B300	20HP	54	240	22.13 x 20.43 x 28.5	177
MSD0068B300	25HP	68	240	22.13 x 20.43 x 28.5	187
MSD0080B300	30HP	80	240	36 x 28.4 x 36.86	340
MSD0104B300	40HP	104	240	36 x 28.4 x 36.86	425
MSD0130B300	50HP	130	240	36 x 28.4 x 36.86	450
MSD0154B300	60HP	154	240	36 x 28.4 x 36.86	460

**Three Phase**

NEMA 1/3R SINEWAVE FILTER, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
MSD0009A300	5HP	9	480	19.13 x 15.50 x 19.50	57
MSD0012A300	7.5HP	12	480	19.13 x 15.50 x 19.50	58
MSD0016A300	10HP	16	480	19.13 x 15.50 x 19.50	58
MSD0023A300	15HP	23	480	19.13 x 15.50 x 19.50	75
MSD0030A300	20HP	30	480	19.13 x 15.50 x 19.50	75
MSD0035A300	25HP	35	480	19.13 x 15.50 x 19.50	75
MSD0045A300	30HP	45	480	19.13 x 15.50 x 19.50	90
MSD0055A300	40HP	55	480	19.13 x 15.50 x 19.50	105
MSD0065A300	50HP	65	480	22.13 x 20.43 x 28.50	144
MSD0080A300	60HP	80	480	22.13 x 20.43 x 28.50	162
MSD0110A300	75HP	110	480	22.13 x 20.43 x 28.50	177
MSD0130A300	100HP	130	480	22.13 x 20.43 x 28.50	187
MSD0160A300	125HP	160	480	36.00 x 28.40 x 36.86	340
MSD0200A300	150HP	200	480	36.00 x 28.40 x 36.86	425
MSD0250A300	200HP	250	480	36.00 x 28.40 x 36.86	450
MSD0305A300	250HP	305	480	36.00 x 28.40 x 36.86	460
MSD0362A300	300HP	362	480	36.00 x 28.40 x 36.86	470
MSD0420A300	350HP	420	480	36.00 x 28.40 x 36.86	575
MSD0480A300	400HP	480	480	36.00 x 28.40 x 36.86	630
MSN0540A300	450HP	540	480	63.95 x 24.58 x 44.00	700
MSN0600A300	500HP	600	480	63.95 x 24.58 x 44.00	713

**OOB Nema 3R Input Filters**

**Three Phase**

5% Nema 3R Input Line Reactor, 3Ø, 240 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRB25HE3R	5HP	17	240	12.25" x 12.5" x 6.75" Wall Mount	18.5
KDRB26HE3R	7.5HP	26	240	12.25" x 12.5" x 6.75" Wall Mount	18.5
KDRD21HE3R	10HP	31	240	12.25" x 12.5" x 6.75" Wall Mount	22.5
KDRD22HE3R	15HP	47	240	12.25" x 12.5" x 6.75" Wall Mount	22.5
KDRC22HE3R	20HP	62	240	12.25" x 12.5" x 6.75" Wall Mount	25.5
KDRF28HE3R	25HP	75	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRF25HE3R	30HP	92	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRF26HE3R	40HP	114	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	67
KDRH24HE3R	50HP	143	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	70
KDRH23HE3R	60HP	169	240	19.13" x 15.43" x 15.43" Wall/Floor Mount	81

5% Nema 3R Input Line Reactor, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRAA3H2E3R1	5HP	8.2	480	12.25" X 12.5" X 6.75" Wall Mount	19
KDRAA4H2E3R1	7.5HP	12	480	12.25" X 12.5" X 6.75" Wall Mount	20
KDRAA5H2E3R1	10HP	14	480	12.25" X 12.5" X 6.75" Wall Mount	20
KDRB2HE3R	15HP	27	480	12.25" X 12.5" X 6.75" Wall Mount	22
KDRC3HE3R	20HP	27	480	12.25" X 12.5" X 6.75" Wall Mount	30
KDRC1HE3R	25HP	35	480	12.25" X 12.5" X 6.75" Wall Mount	30
KDRE2HE3R	30HP	45	480	12.25" X 12.5" X 6.75" Wall Mount	31
KDRF4HE3R	40HP	60	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRF1HE3R	50HP	85	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRF2HE3R	60HP	77	480	19" X 15.5" X 15.5" Wall/Floor Mount	63
KDRH2HE3R	75HP	100	480	19" X 15.5" X 15.5" Wall/Floor Mount	82
KDRI2HE3R	100HP	125	480	19" X 15.5" X 15.5" Wall/Floor Mount	82
KDRG3HE3R	125HP	160	480	22" X 20.5" X 24.5" Wall/Floor Mount	127
KDRG1HE3R	150HP	185	480	22" X 20.5" X 24.5" Wall/Floor Mount	127
KDRJ1HE3R	200HP	240	480	22" X 20.5" X 24.5" Wall/Floor Mount	136
KDRL1HE3R	250HP	310	480	22" X 20.5" X 24.5" Wall/Floor Mount	162
KDRL2HE3R	300HP	365	480	22" X 20.5" X 24.5" Wall/Floor Mount	162
KDRL3HE3R	350HP	435	480	22" X 20.5" X 24.5" Wall/Floor Mount	166
KDRL4HE3R	400HP	480	480	22" X 20.5" X 24.5" Wall/Floor Mount	176
KDRL5HE3R	450HP	540	480	36" x 28.39"x 30.19" Floor Mount	295
KDRL6HE3R	500HP	590	480	36" x 28.39"x 30.19" Floor Mount	295

**Three Phase**

NEMA 3R Harmonic Filter, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
HSD0005AW31000	5HP	8	480	19" X 15.5" X 19.5" Wall Mount	63
HSD0008AW31000	7.5HP	12	480	19" X 15.5" X 19.5" Wall Mount	80
HSD0010AW31000	10HP	16	480	19" X 15.5" X 19.5" Wall Mount	80
HSD0015AW31000	15HP	23	480	22" X 20.5" X 28.5" Wall Mount	88
HSD0020AW31000	20HP	31	480	22" X 20.5" X 28.5" Wall Mount	93
HSD0025AW31000	25HP	38	480	22" X 20.5" X 28.5" Wall Mount	95
HSD0030AW31000	30HP	49	480	22" X 20.5" X 28.5" Wall Mount	105
HSD0040AW31000	40HP	62	480	36" X 28.5" X 37" Wall Mount	146
HSD0050AW31000	50HP	73	480	36" X 28.5" X 37" Wall Mount	146
HSD0060AW31000	60HP	87	480	36" X 28.5" X 37" Wall Mount	188
HSD0075AW31000	75HP	105	480	36" X 28.5" X 37" Wall Mount	189
HSD0100AW31000	100HP	140	480	36" X 28.5" X 37" Wall Mount	238
HSD0125AW31000	125HP	170	480	36" X 28.5" X 37" Wall Mount	305
HSD0150AW31000	150HP	209	480	36" X 28.4" X 36.86" Wall Mount	350
HSD0200AW31000	200HP	257	480	56" X 40.6" X 48.5" Floor Mount	510
HSD0250AW31000	250HP	321	480	56" X 40.6" X 48.5" Floor Mount	512
HSD0300AW31000	300HP	405	480	56" X 40.6" X 48.5" Floor Mount	780
HSD0350AW31000	350HP	445	480	56" X 40.6" X 48.5" Floor Mount	819
HSD0400AW31000	400HP	483	480	56" X 40.6" X 48.5" Floor Mount	975
HSD0450AW31000	450HP	540	480	56" X 40.6" X 48.5" Floor Mount	1130
HSD0500AW31000	500HP	637	480	56" X 40.6" X 48.5" Floor Mount	1140

**OOB Nema 3R Output Filters**

**Three Phase**

1.5% Nema 3R Output Line Reactor, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
KDRA3PE3R	5HP	8	480	11.5 X 10 X 12	19
KDRA4PE3R	7.5HP	12	480	11.5 X 10 X 12	20
KDRB1PE3R	10HP	16	480	11.5 X 10 X 12	22
KDRD1PE3R	15HP	21	480	11.5 X 10 X 12	25
KDRD2PE3R	20HP	27	480	11.5 X 10 X 12	25
KDRD3PE3R	25HP	35	480	11.5 X 10 X 12	27
KDRD4PE3R	30HP	45	480	11.5 X 10 X 12	27
KDRC1PE3R	40HP	55	480	11.5 X 10 X 12	30
KDRF1PE3R	50HP	80	480	19.18 X 15.62 X 19.5	63
KDRF2PE3R	60HP	80	480	19.18 X 15.62 X 19.5	63
KDRF3PE3R	75HP	110	480	19.18 X 15.62 X 19.5	67
KDRH1PE3R	100HP	130	480	19.18 X 15.62 X 19.5	77
KDRI1PE3R	125HP	160	480	19.18 X 15.62 X 19.5	95
KDRI2PE3R	150HP	200	480	22.15 X 20.62 X 28.5	125
KDRG1PE3R	200HP	250	480	22.15 X 20.62 X 28.5	140
KDRJ1PE3R	250HP	310	480	22.15 X 20.62 X 28.5	150
KDRJ2PE3R	300HP	365	480	22.15 X 20.62 X 28.5	150
KDRL1PE3R	350HP	420	480	22.15 X 20.62 X 28.5	168
KDRL2PE3R	400HP	480	480	22.15 X 20.62 X 28.5	175
KDRL3PE3R	450HP	550	480	22.15 X 20.62 X 28.5	180
KDRL4PE3R	500HP	600	480	22.15 X 20.62 X 28.5	180

NEMA 3R DV/DT FILTER, 3Ø, 480 VAC					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
V1K8A03	5	8	480	11.45 x 10 x 12	25
V1K12A03	7.5	12	480	11.45 x 10 x 12	25
V1K16A03	10	16	480	11.45 x 10 x 12	29
V1K18A03	10	18	480	11.45 x 10 x 12	29
V1K21A03	15	21	480	11.45 x 10 x 12	29
V1K25A03	15	25	480	11.45 x 10 x 12	29
V1K27A03	20	27	480	11.45 x 10 x 12	29
V1K35A03	25	35	480	19.18 x 15.62 x 19.5	56
V1K45A03	30	45	480	19.18 x 15.62 x 19.5	56
V1K55A03	40	55	480	19.18 x 15.62 x 19.5	56
V1K80A03	50 - 60	80	480	19.18 x 15.62 x 19.5	62

**Three Phase**

<b>NEMA 3R DV/DT FILTER, 3Ø, 480 VAC</b>					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
V1K110A03	75	110	480	19.18 x 15.62 x 19.5	74
V1K130A03	100	130	480	19.18 x 15.62 x 19.5	89
V1K160A03	125	160	480	19.18 x 15.62 x 19.5	99
V1K200A03	150	200	480	19.18 x 15.62 x 19.5	99
V1K250A03	200	250	480	19.18 x 15.62 x 19.5	99
V1K305A03	250	305	480	22.15 x 20.62 x 28.5	109
V1K362A03	300	362	480	22.15 x 20.62 x 28.5	109
V1K420A03	350	420	480	22.15 x 20.62 x 28.5	156
V1K480A03	400	480	480	22.15 x 20.62 x 28.5	161
V1K600A03	500	600	480	36 x 28.21 x 36.86	297

<b>NEMA 1/3R SINEWAVE FILTER, 3Ø, 480 VAC</b>					
Part Number	Size	Amp	Voltage	Dimensions	Ship'g Wt (lbs)
MSD0009A300	5HP	9	480	19.13 x 15.50 x 19.50	57
MSD0012A300	7.5HP	12	480	19.13 x 15.50 x 19.50	58
MSD0016A300	10HP	16	480	19.13 x 15.50 x 19.50	58
MSD0023A300	15HP	23	480	19.13 x 15.50 x 19.50	75
MSD0030A300	20HP	30	480	19.13 x 15.50 x 19.50	75
MSD0035A300	25HP	35	480	19.13 x 15.50 x 19.50	75
MSD0045A300	30HP	45	480	19.13 x 15.50 x 19.50	90
MSD0055A300	40HP	55	480	19.13 x 15.50 x 19.50	105
MSD0065A300	50HP	65	480	22.13 x 20.43 x 28.50	144
MSD0080A300	60HP	80	480	22.13 x 20.43 x 28.50	162
MSD0110A300	75HP	110	480	22.13 x 20.43 x 28.50	177
MSD0130A300	100HP	130	480	22.13 x 20.43 x 28.50	187
MSD0160A300	125HP	160	480	36.00 x 28.40 x 36.86	340
MSD0200A300	150HP	200	480	36.00 x 28.40 x 36.86	425
MSD0250A300	200HP	250	480	36.00 x 28.40 x 36.86	450
MSD0305A300	250HP	305	480	36.00 x 28.40 x 36.86	460
MSD0362A300	300HP	362	480	36.00 x 28.40 x 36.86	470
MSD0420A300	350HP	420	480	36.00 x 28.40 x 36.86	575
MSD0480A300	400HP	480	480	36.00 x 28.40 x 36.86	630
MSN0540A300	450HP	540	480	63.95 x 24.58 x 44.00	700
MSN0600A300	500HP	600	480	63.95 x 24.58 x 44.00	713

**TVSS Surge Arrestor Kits**

Chassis Kits includes wire and mounting hardware for installation into existing enclosure.

<b>230Volt Surge Protection IP00 Chassis</b>	
230 VAC	
TVSS Field Kit Model Number	HP
TVSS FK 240-005-060	5-60

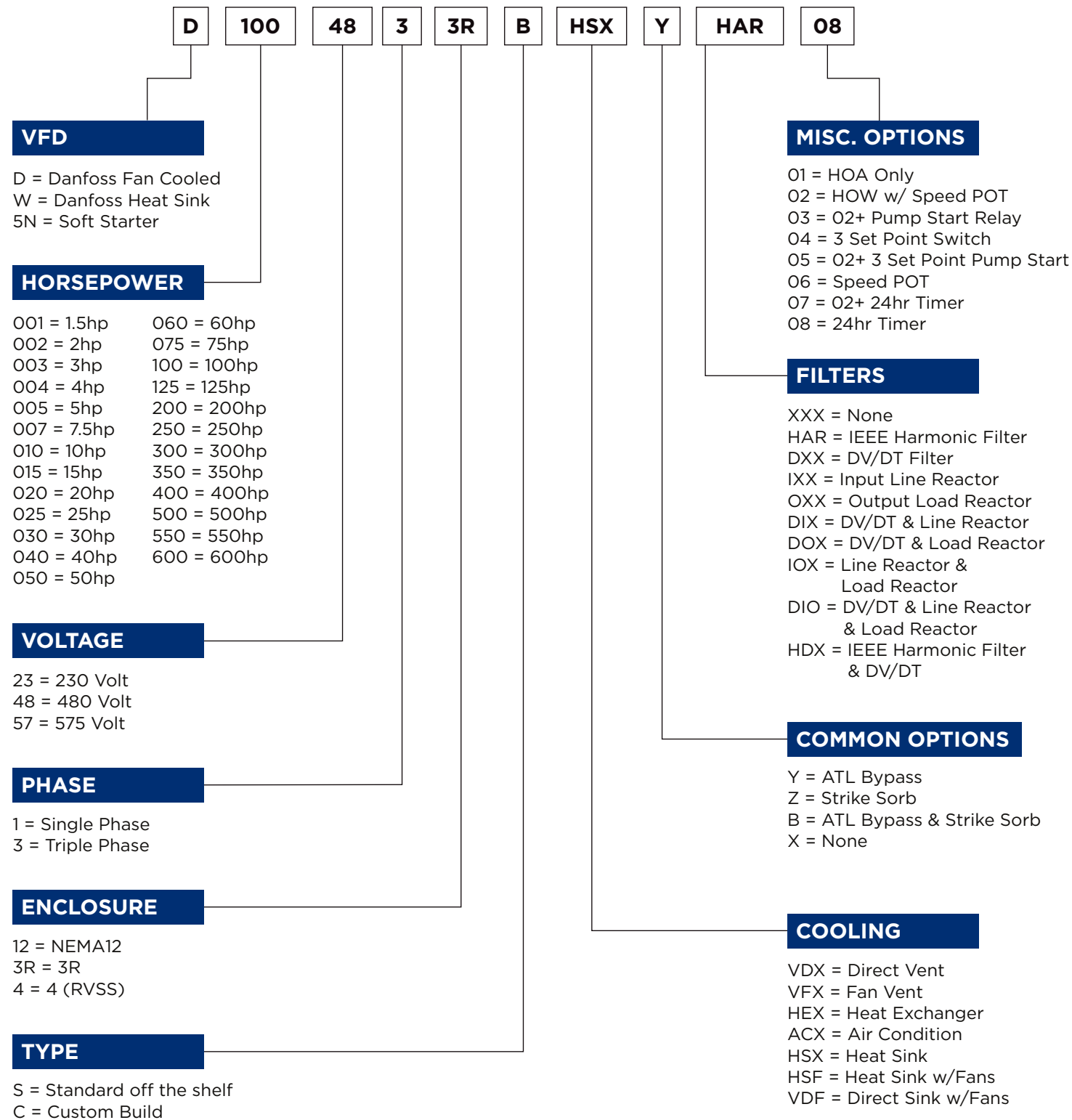
<b>480Volt Surge Protection IP00 Chassis</b>	
480 VAC	
TVSS Field Kit Model Number	HP
TVSS FK 480-005-125	5-125
TVSS FK 480-150-600	150-600

Enclosure units includes TVSS mounted in Nema 4 enclosure (No wire provided).

<b>230Volt Surge Protection Nema 1/4 Enclosed</b>	
230 VAC	
TVSS Field Kit Model Number	HP
TVSS 240-005-060-N4	5-60

<b>480Volt Surge Protection Nema 1/4 Enclosed</b>	
480 VAC	
TVSS Field Kit Model Number	HP
TVSS 480-005-125-N4	5-125
TVSS 480-150-600-N4	150-600

# CONFIGURED PART NUMBERING SYSTEM



## W-Series Heat Sink Panel

W-Series panels utilizes Heat Sink cooling up to 125HP. Panels 150HP and above will continue to be offered with standard back channel venting and fan option. The W-Series panels are standard offerings, however Mitchell's is committed to serving your VFD needs, including custom engineering the perfect solution for your project. Mitchell Lewis & Staver continues to lead the way in defining the best engineered solutions for hydraulic and electrical applications. The W-Series Heat Sink panel has been created to offer end users a significant reduction in size and weight; and is more favorable in cost of ownership in comparison to that of fan cooling. The manufacturing of the Heat Sink panel involves installing the drive with the Heat Sink extending through the back of the enclosure. For VFDs below 150HP, the Heat Sink can transfer heat much more effectively to the atmosphere than other cooling methods.

### Benefits of the W-Series Heat Sink Panel:

- Most competitive price point NEMA 3R product on the market.
- Wall-mount enclosures with smaller footprint and weight. No slab required.
- Lifting eyes and key mount wall brackets for easier wall-mount installation.
- No filters, fans, or dirty electronics from utilizing outside air.
- Service entrance rated disconnect with external operator and door interlock.
- Door mounted VFD operator interface, HOA selector, & speed potentiometer standard.
- Lockable acrylic hinged cover w/ UV inhibitors to protect door mounted components.
- 120V transformer with fusing for owner supplied ancillary equipment.
- 120V and VFD I/O wired to a terminal strip for convenience with field connections.



### Features:

- NEMA 3R wall mount enclosure
- Locking and lifting provisions
- Service entrance rated
- Service disconnect with lockable external operator
- Danfoss FC202 VFD w/door mounted interface
- HOA selector switch w/speed pot
- Lockable clear operator cover w/UV inhibitors
- 120V control transformer with fusing
- Through the back Heat Sink cooling system



### Configured W-Series with Line Reactor, HOA & Speed Pot

#### Three Phase

NEMA 3R Panel, 3Ø, 230 VAC			
Base Part Number	HP	Ampacity	Dimensions
W0052333RCHSFIXX02	5	16.7	36" X 30" X 12" Wall Mount
W0072333RCHSFIXX02	7.5	24.2	36" X 30" X 12" Wall Mount
W0102333RCHSFIXX02	10	30.8	36" X 30" X 12" Wall Mount
W0152333RCHSFIXX02	15	46.2	36" X 30" X 12" Wall Mount
W0202333RCHSFIXX02	20	59.4	48" X 36" X 12" Wall Mount
W0252333RCHSFIXX02	25	74.8	48" X 36" X 12" Wall Mount
W0302333RCHSFIXX02	30	88	48" X 36" X 12" Wall Mount
W0402333RCHSFIXX02	40	115	48" X 36" X 12" Wall Mount
W0502333RCHSFIXX02	50	143	48" X 36" X 16" Wall Mount
W0602333RCHSFIXX02	60	170	48" X 36" X 16" Wall Mount

NEMA 3R Panel, 3Ø, 480 VAC			
Base Part Number	HP	Ampacity	Dimensions
W0054833RCHSFIXX02	5	8.2	36" X 30" X 12" Wall Mount
W0074833RCHSFIXX02	7.5	11	36" X 30" X 12" Wall Mount
W0104833RCHSFIXX02	10	14	36" X 30" X 12" Wall Mount
W0154833RCHSFIXX02	15	21	36" X 30" X 12" Wall Mount
W0204833RCHSFIXX02	20	27	36" X 30" X 12" Wall Mount
W0254833RCHSFIXX02	25	34	36" X 30" X 12" Wall Mount
W0304833RCHSFIXX02	30	40	48" X 36" X 12" Wall Mount
W0404833RCHSFIXX02	40	52	48" X 36" X 12" Wall Mount
W0504833RCHSFIXX02	50	65	48" X 36" X 12" Wall Mount
W0604833RCHSFIXX02	60	77	48" X 36" X 12" Wall Mount
W0754833RCHSFIXX02	75	105	48" X 36" X 12" Wall Mount
W1004833RCHSFIXX02	100	130	48" X 36" X 16" Wall Mount
W1254833RCHSFIXX02	125	160	48" X 36" X 16" Wall Mount
W1504833RCVDFIXX02	150	190	72" X 36" X 16" Floor Mount
W2004833RCVDFIXX02	200	240	72" X 36" X 16" Floor Mount
W2504833RCVDFIXX02	250	303	72" X 36" X 16" Floor Mount
W3004833RCVDFIXX02	300	361	60" X 60" X 18" Floor Mount
W3504833RCVDFIXX02	350	443	60" X 60" X 18" Floor Mount
W4504833RCVDFIXX02	450	540	60" X 60" X 18" Floor Mount
W5004833RCVDFIXX02	500	590	72" X 60" X 24" Floor Mount

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**Note:** W-Series panels now has provision for field installable TVSS Kits

### Configured W-Series

NEMA 3R Panel, 1Ø, 230 VAC		
Base Part Number	HP	Amp
W0052313RC	5	16.7
W0072313RC	7.5	24.2
W0102313RC	10	30.8
W0202313RC	15-20	59.4
W0302313RC	25-30	88

NEMA 3R Panel, 1Ø, 480 VAC		
Base Part Number	HP	Amp
W0104813RC	5-10	15
W0154813RC	15	21
W0254813RC	20-25	34
W0504813RC	30-50	65

NEMA 3R Panel, 3Ø, 230 VAC		
Base Part Number	HP	Amp
W0052333RC	5	16.7
W0072333RC	7.5	24.2
W0102333RC	10	30.8
W0152333RC	15	46.2
W0202333RC	20	59.4
W0252333RC	25	74.8
W0302333RC	30	88
W0402333RC	40	115
W0502333RC	50	143
W0602333RC	60	170

**Note:** If any of the options of XTL Bypass, Power Quality, Strike Sorb, Line Reactor, Output Reactor, or DV/DT Filter are selected, the part number should end with C not S.

**Configured W-Series**

NEMA 3R Panel, 3Ø, 480 VAC		
Base Part Number	HP	Amp
W0054833RC	5	8.2
W0074833RC	7.5	11
W0104833RC	10	14
W0154833RC	15	21
W0204833RC	20	27
W0254833RC	25	34
W0304833RC	30	40
W0404833RC	40	52
W0504833RC	50	65
W0604833RC	60	77
W0754833RC	75	105
W1004833RC	100	130
W1254833RC	125	160
W1504833RC	150	190
W2004833RC	200	240
W2504833RC	250	303
W3004833RC	300	361
W3504833RC	350	443
W4504833RC	450	540
W5004833RC	500	590

**Note:** RVSS Panel now has provision for field installable TVSS Kits.

**W SERIES NON-HP DEPENDANT ADDERS DIGITS 18-19 IN PART NUMBER**

Adder Suffix	Description
01	Hand Off Auto Switch Only
02	Hand Off Auto Switch + Manual Speed Pot
03	Hand Off Auto Switch + Manual Speed Pot + Pump Start Relay
04	3 Sepoint Switch Only
05	Hand Off Auto Switch + Manual Speed Pot + 3 Sepoint Pump Start Relays
06	Speed Pot Only
07	Hand Off Auto Switch + Manual Speed Pot + 24Hr Electric Timer
08	24Hr Electric Timer Only

**Note:** If any of the options of XTL Bypass, Power Quality, Strike Sorb, Line Reactor, Output Reactor, or DV/DT Filter are selected, the part number should end with C not S.

### D-Series Panels

D-Series panels are blown and filter fan cooled panels. The standard D-Series panel comes standard with drive display on the door utilizing the Hand Off Auto integrated in the keypad, and 120VAC control. The standard D-Series panel does not include any input or output filters standard, but can added as custom options.

#### Single Phase

##### NEMA 3R Panel, 1Ø, 230 VAC

Base Part Number	HP	Amp	Dimensions
D0052313RS	5	16.7	48" X 30" X 16" Wall Mount
D0072313RS	7.5	24.2	48" X 30" X 16" Wall Mount
D0102313RS	10	30.8	48" X 30" X 16" Wall Mount
D0202313RS	15-20	59.4	60" X 36" X 16" Floor Mount
D0302313RS	25-30	88	60" X 36" X 16" Floor Mount

##### NEMA 3R Panel, 1Ø, 480 VAC

Base Part Number	HP	Amp	Dimensions
D0104813RS	5-10	15	48" X 30" X 16" Wall Mount
D0154813RS	15	21	48" X 30" X 16" Wall Mount
D0254813RS	20-25	34	60" X 36" X 16" Floor Mount
D0504813RS	30-50	65	60" X 36" X 16" Floor Mount

#### Three Phase

##### NEMA 3R Panel, 3Ø, 230 VAC

Base Part Number	HP	Amp	Dimensions
D0052333RS	5	16.7	36" X 24" X 16" Wall Mount
D0072333RS	7.5	24.2	48" X 36" X 16" Wall Mount
D0102333RS	10	30.8	48" X 36" X 16" Wall Mount
D0152333RS	15	46.2	48" X 36" X 16" Wall Mount
D0202333RS	20	59.4	48" X 36" X 16" Wall Mount
D0252333RS	25	74.8	48" X 36" X 16" Wall Mount
D0302333RS	30	88	48" X 36" X 16" Wall Mount
D0402333RS	40	115	48" X 36" X 16" Wall Mount
D0502333RS	50	143	60" X 36" X 16" Floor Mount
D0602333RS	60	170	60" X 36" X 16" Floor Mount

##### NEMA 3R Panel, 3Ø, 480 VAC

Base Part Number	HP	Amp	Dimensions
D0054833RS	5	8.2	36" X 24" X 16" Wall Mount
D0074833RS	7.5	11	36" X 24" X 16" Wall Mount
D0104833RS	10	14	36" X 30" X 12" Wall Mount
D0154833RS	15	21	48" X 36" X 16" Wall Mount
D0204833RS	20	27	48" X 36" X 16" Wall Mount
D0254833RS	25	34	48" X 36" X 16" Wall Mount
D0304833RS	30	40	48" X 36" X 16" Wall Mount
D0404833RS	40	52	48" X 36" X 16" Wall Mount
D0504833RS	50	65	48" X 36" X 16" Wall Mount
D0604833RS	60	77	48" X 36" X 16" Wall Mount
D0754833RS	75	105	48" X 36" X 16" Wall Mount
D1004833RS	100	130	60" X 36" X 16" Floor Mount
D1254833RS	125	160	60" X 36" X 16" Floor Mount
D1504833RS	150	190	60" X 36" X 16" Floor Mount
D2004833RS	200	240	60" X 36" X 16" Floor Mount
D2504833RS	250	303	60" X 36" X 16" Floor Mount
D3004833RS	300	361	60" X 48" X 18" Floor Mount
D3504833RS	350	443	60" X 48" X 18" Floor Mount
D4504833RS	450	540	60" X 48" X 18" Floor Mount
D5004833RS	500	590	72" X 60" X 24" Floor Mount

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**Note:** D-Series panels now has provision for field installable TVSS Kits.

**Configured D-Series**

**NEMA 3R Panel, 1Ø, 230 VAC**

Base Part Number	HP	Amp
D0052313RC	5	16.7
D0072313RC	7.5	24.2
D0102313RC	10	30.8
D0202313RC	15-20	59.4
D0302313RC	25-30	88

**NEMA 3R Panel, 1Ø, 480 VAC**

Base Part Number	HP	Amp
D0104813RC	5-10	15
D0154813RC	15	21
D0254813RC	20-25	34
D0504813RC	30-50	65
D0302313RC	25-30	88

**NEMA 3R Panel, 3Ø, 230 VAC**

Base Part Number	HP	Amp
D0052333RC	5	16.7
D0072333RC	7.5	24.2
D0102333RC	10	30.8
D0152333RC	15	46.2
D0202333RC	20	59.4
D0252333RC	25	74.8
D0302333RC	30	88
D0402333RC	40	115
D0502333RC	50	143
D0602333RC	60	170

**Note:** If any of the options of XTL Bypass, Power Quality, Strike Sorb, Line Reactor, Output Reactor, or DV/DT Filter are selected, the part number should end with C not S.

**NEMA 3R Panel, 3Ø, 480 VAC**

Base Part Number	HP	Amp
D0054833RC	5	8.2
D0074833RC	7.5	11
D0104833RC	10	14
D0154833RC	15	21
D0204833RC	20	27
D0254833RC	25	34
D0304833RC	30	40
D0404833RC	40	52
D0504833RC	50	65
D0604833RC	60	77
D0754833RC	75	105
D1004833RC	100	130
D1254833RC	125	160
D1504833RC	150	190
D2004833RC	200	240
D2504833RC	250	303
D3004833RC	300	361
D3504833RC	350	443
D4504833RC	450	540
D5004833RC	500	590

**Note:** RVSS Panel now has provision for field installable TVSS Kits.

**D SERIES NON-HP DEPENDANT ADDERS DIGITS 18-19 IN PART NUMBER**

Adder Suffix	Description
01	Hand Off Auto Switch Only
02	Hand Off Auto Switch + Manual Speed Pot
03	Hand Off Auto Switch + Manual Speed Pot + Pump Start Relay
04	3 Sepoint Switch Only
05	Hand Off Auto Switch + Manual Speed Pot + 3 Sepoint Pump Start Relays
06	Speed Pot Only
07	Hand Off Auto Switch + Manual Speed Pot + 24Hr Electric Timer
08	24Hr Electric Timer Only

**Note:** If any of the options of XTL Bypass, Power Quality, Strike Sorb, Line Reactor, Output Reactor, or DV/DT Filter are selected, the part number should end with C not S.

### Configured MCD600 RVSS Panels

#### Three Phase

#### NEMA 4 230Volt 3Ø Reduced Voltage Soft Starter Panel

Base Part Number	HP	AMPS	Dimensions
M6-0052303-XX	5	21	36" X 30" X 12" Wall Mount
M6-0102303-XX	7.5-10	32	36" X 30" X 12" Wall Mount
M6-0152303-XX	15	48	36" X 30" X 12" Wall Mount
M6-0202303-XX	20	56	36" X 30" X 12" Wall Mount
M6-0252303-XX	25	73	36" X 30" X 12" Wall Mount
M6-0302303-XX	30	84	36" X 30" X 12" Wall Mount
M6-0402303-XX	40	105	36" X 30" X 12" Wall Mount
M6-0502303-XX	50	141	36" X 30" X 12" Wall Mount
M6-0602303-XX	60	160	36" X 30" X 12" Wall Mount
M6-0752303-XX	75	198	36" X 30" X 12" Wall Mount

#### NEMA 4 480Volt 3Ø Reduced Voltage Soft Starter Panel

Base Part Number	HP	AMPS	Dimensions
M6-0104803-XX	10	21	36" X 30" X 12" Wall Mount
M6-0204803-XX	15-20	32	36" X 30" X 12" Wall Mount
M6-0254803-XX	25	40	36" X 30" X 12" Wall Mount
M6-0304803-XX	30	48	36" X 30" X 12" Wall Mount
M6-0404803-XX	40	56	36" X 30" X 12" Wall Mount
M6-0504803-XX	50	73	36" X 30" X 12" Wall Mount
M6-0604803-XX	60	84	36" X 30" X 12" Wall Mount
M6-0754803-XX	75	105	36" X 30" X 12" Wall Mount
M6-1004803-XX	100	141	36" X 30" X 12" Wall Mount
M6-1254803-XX	125	160	36" X 30" X 12" Wall Mount
M6-1504803-XX	150	198	36" X 30" X 12" Wall Mount
M6-2004803-XX	200	270	48" X 36" X 16" Wall Mount
M6-2504803-XX	250	318	48" X 36" X 16" Wall Mount
M6-3004803-XX	300	385	48" X 36" X 16" Wall Mount
M6-3504803-XX	350	440	60" X 36" X 16" Floor Mount
M6-4004803-XX	400	490	60" X 36" X 16" Floor Mount
M6-4504803-XX	450	525	60" X 36" X 16" Floor Mount
M6-5004803-XX	500	596	60" X 36" X 16" Floor Mount

**Note:** The above horsepower ratings are for reference only. Unlike motors which have service factors, the drive amperage ratings are absolute and can not be exceeded for more than 60 seconds. This means that applications that require running in the service factor like submersibles may require the next larger size drive.

**Note:** MCD500 panels now has provision for field installable TVSS Kits

### Transducers

#### TRANSDUCERS & ACCESSORIES

Part Number	Description
700 KPSI Series	Submersible Transducer
700 KPSI Series	Submersible Cable (per foot)
LTA Series	Submersible Transducer
LTB Series	Submersible Transducer w/ Cage
LTA/LTB Series	Submersible Cable (per foot)
SBLT Series	Dwyer General Purpose, 1" Sub Trans. (up to 300psi)
MBLT Series	Dwyer Well Level Monitor (up to 300psi - .62" dia)
SBLT/MBLT Series	Dwyer Transducer cable (up to 2000')
060G1141	Danfoss 0-100 PSI Threaded Transducer
060G1142	Danfoss 0-150 PSI Threaded Transducer
060G1143	Danfoss 0-200 PSI Threaded Transducer
060G1144	Danfoss 0-300 PSI Threaded Transducer
060G1145	Danfoss 0-500 PSI Threaded Transducer
Belden 9318	Shielded Transducer Cable (per foot)
060G000812	Danfoss DIN 1/4" NPT Conduit Cap

### Parts

#### PARTS

Part Number	Description
130B1107	Danfoss LCP Replacement Keypad
130B1168	Control Card
130B1117	Danfoss Remote Mount Kit Keypad
130B1143	Danfoss Analog I/O Option w/Battery Backup
130B1119	Danfoss Ethernet IP Option Card
130B1196	Danfoss Ethernet Modbus TCP Option Card
130B1118	Danfoss Extended Cascade Control Card
130B1154	Advanced Cascade Control Card
186 1160 0006	Pfannenberg 8" Replacement Filters
186 1160 0037	Pfannenberg 12" Replacement Filters

**Fuses**

**1Ø Input 230 VAC**

Part No.	Horsepower	Ampacity	Fuse Class
JKS-60	5HP	60 Amps	J
JKS-80	7.5HP	80 Amps	J
JKS-100	10HP	100 Amps	J
JKS-150	20HP	150 Amps	J
JKS-200	30HP	200 Amps	J

**1Ø Input 480 VAC**

Part No.	Horsepower	Ampacity	Fuse Class
JKS-50	10HP	50 Amps	J
JKS-80	15HP	80 Amps	J
JKS-125	25HP	125 Amps	J
JKS-200	50HP	200 Amps	J

**3Ø Input 230 VAC**

Part No.	Horsepower	Ampacity	Fuse Class
JKS-30	5HP	30 Amps	J
JKS-50	7.5HP	50 Amps	J
JKS-50	10HP	50 Amps	J
JKS-60	15HP	60 Amps	J
JKS-80	20HP	80 Amps	J
JKS-100	25HP	100 Amps	J
JKS-125	30HP	125 Amps	J
JKS-150	40HP	150 Amps	J
JKS-200	50HP	200 Amps	J
JKS-200	60HP	200 Amps	J

**3Ø Input 480 VAC**

Part No.	Horsepower	Ampacity	Fuse Class
JKS-20	5HP	20 Amps	J
JKS-30	7.5HP	30 Amps	J
JKS-30	10HP	30 Amps	J
JKS-40	15HP	40 Amps	J
JKS-40	20HP	40 Amps	J
JKS-50	25HP	50 Amps	J
JKS-60	30HP	60 Amps	J
JKS-80	40HP	80 Amps	J
JKS-100	50HP	100 Amps	J
JKS-125	60HP	125 Amps	J
JKS-150	75HP	150 Amps	J
JKS-200	100HP	200 Amps	J
JKS-200	125HP	200 Amps	J
FWH-250A	150HP	250 Amps	Semiconductor
FWH-350A	200HP	350 Amps	Semiconductor
FWH-400A	250HP	400 Amps	Semiconductor
FWH-500A	300HP	500 Amps	Semiconductor
FWH-600A	350HP	600 Amps	Semiconductor

These part numbers represents our current drive fuse type and manufacturer per horsepower and can be ordered as spare parts. Consult O3 to confirm compatability.

**Replacement Modules Only**

**230Volt Surge Protection**

TVSS Model Number	Replacement	HP
BA5-3-00-A-GEN		5-60

**480Volt Surge Protection**

TVSS Model Number	Replacement	HP
BA5-3-00-C-GEN		5-125
GB3-3-00-C		150-600

**OOB FC202 IP00 Chassis Units**

*Three Phase*

Chassis VFD, 3Ø Input, 3Ø Output, 230 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131B9210	5	16.7	10.6" X 5.1" X 8.1"	14.6	A3
131F8207	7.5	24.2	15.71" X 6.5" X 9.81"	26.5	B3
131F7536	10	30.8	15.71" X 6.5" X 9.81"	26.5	B3
131H2531	15	46.2	15.71" X 6.5" X 9.81"	26.5	B3
131H4017	20	59.4	20.48" X 9.06" X 9.53"	51.8	B4
131H4922	25	74.8	20.48" X 9.06" X 9.53"	51.8	B4
131H5475	30	88	21.66" X 12.13" X 13.12"	77.2	C3
131H6160	40	115	21.66" X 12.13" X 13.12"	77.2	C3
131F2225	50	143	25.99" X 12.13" X 13.12"	110.3	C4
131F2590	60	170	25.99" X 12.13" X 13.12"	110.3	C4

Chassis VFD, 3Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
131B8920	5	8.2	10.6" X 3.55" X 8.1"	10.8	A2
131B8940	7.5	11	10.6" X 5.1" X 8.1"	14.6	A3
131B8650	10	14.5	10.6" X 5.1" X 8.1"	14.6	A3
131F6637	15	21	15.71" X 6.5" X 9.81"	26.5	B3
131F6641	20	27	15.71" X 6.5" X 9.81"	26.5	B3
131F6645	25	34	15.71" X 6.5" X 9.81"	26.5	B3
131F6765	30	40	20.48" X 9.06" X 9.53"	51.8	B4
131F6770	40	52	20.48" X 9.06" X 9.53"	51.8	B4
131F6775	50	65	20.48" X 9.06" X 9.53"	51.8	B4
131F6650	60	80	21.66" X 12.13" X 13.12"	77.2	C3
131F6654	75	105	21.66" X 12.13" X 13.12"	77.2	C3
131F6658	100	130	25.99" X 12.13" X 13.12"	110.3	C4
131F6663	125	160	25.99" X 12.13" X 13.12"	110.3	C4
134F0366	150	190	35.79" X 9.85" X 14.77"	136.7	D3h
134F0368	200	240	35.79" X 9.85" X 14.77"	136.7	D3h
134F0371	250	302	35.79" X 9.85" X 14.77"	136.7	D3h
134F0372	300	361	44.18" X 13.78" X 14.77"	275.6	D4h
134F0373	350	443	44.18" X 13.78" X 14.77"	275.6	D4h
134F4192	450	540	44.18" X 13.78" X 14.77"	275.6	D4h
135U2915	500	590	62.13" X 19.96" X 18.98"	600	E3h

Chassis VFD, 3Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
135U2916	550	678	62.13" X 19.96" X 18.98"	600	E3h
135U2463	600	730	62.13" X 19.96" X 18.98"	600	E3h
135U2462	650	780	62.13" X 23.90" X 18.98"	650	E4h
135U3823	750	890	62.13" X 23.90" X 18.98"	650	E4h

**OOB MCD600 IP00 Chassis Units**

*Three Phase*

Chassis RVSS, 3Ø Input, 3Ø Output, 230 VAC					
Part Number	HP	AMP	Dimensions	Ship'g Wt (lbs)	Size Code
136G7346	7.5	21	13.23" x 5.99" x 9.1"	12.6	S1
136G7347	10-15	43	13.23" x 5.99" x 9.1"	12.6	S1
136G7348	20-25	69	13.23" x 5.99" x 9.1"	12.6	S1
136G7349	30	80	13.23" x 5.99" x 9.1"	14	S1
136G8768	40	104	13.23" x 5.99" x 9.1"	14	S1
136G8774	50	136	19.49" x 5.91" x 7.21"	30.9	S2
136G8779	60-75	194	19.49" x 5.91" x 7.21"	30.9	S2
136G7353	100	310	20.59" x 5.91" x 8.39"	37.1	S2

Chassis RVSS, 3Ø Input, 3Ø Output, 480 VAC					
Part Number	HP	AMP @ 50°C	Dimensions	Ship'g Wt (lbs)	Size Code
136G7346	15	21	13.23" x 5.99" x 9.1"	12.6	S1
136G7347	20-25	43	13.23" x 5.99" x 9.1"	12.6	S1
136G7348	30-50	69	13.23" x 5.99" x 9.1"	12.6	S1
136G7349	60	80	13.23" x 5.99" x 9.1"	14	S1
136G8768	75	104	13.23" x 5.99" x 9.1"	14	S1
136G8774	100	136	19.49" x 5.91" x 7.21"	30.9	S2
136G8779	125-150	194	19.49" x 5.91" x 7.21"	30.9	S2
136G7353	200-250	310	20.59" x 5.91" x 8.39"	37.1	S2
136G8794	300	410	20.59" x 5.91" x 8.39"	37.1	S2
136G7354	350	453	20.59" x 5.91" x 8.39"	44.76	S2
136G7354	400-450	515	20.59" x 5.91" x 8.39"	44.76	S2
136G7355	450-500	580	20.59" x 5.91" x 8.39"	44.76	S2
136Z4283	500	684	24.3" x 17.6" x 12.3"	134.49	S3
136Z4305	600	757	24.3" x 17.6" x 12.3"	134.49	S3
136Z4306	700	881	24.3" x 17.6" x 12.3"	134.49	S3

**Warranty Information**

**MITCHELL LEWIS & STAVER**

Mitchell Lewis & Staver warrants manufactured equipment to be free from defects in materials and workmanship for twelve (12) months from date of invoice from Mitchell Lewis & Staver or its authorized sales channel. This warranty shall not apply to equipment that has been (a) altered by others than Mitchell Lewis & Staver without authorization, (b) to equipment which has been subjected to negligence, accident or damage by circumstance beyond Mitchell Lewis & Staver’s control, or (c) improper operation, maintenance or storage other than normal use.

**DANFOSS**

Danfoss warrants that VLT Variable Frequency Drives, AC VFD Panels and Harmonic Filters, (except VLT Micro Drive, Decentral Drives, Soft Starters and their options) to be free from defects in material and workmanship for 24 months from date of shipment. Danfoss warrants that VLT Micro Drive, Decentral Drives and Soft Starters and their options will be free from defects in materials and workmanship for a period of 12 months from date of shipment. Accessories for all drives ordered for shipment subsequent to the drive and all items mounted separate from the drive will be free from defects in materials or workmanship for a period of 12 months, from date of shipment. All drives parts will be free from defects in materials or workmanship for a period of 6 months from date of shipment.

This warranty shall be voided if the article in question is improperly installed, applied, operated or maintained; subjected to overload, misuse, negligence or an accident; or repaired or altered outside of the Danfoss factory or by anyone other than an authorized Danfoss service partner under direction of Danfoss. Products manufactured by others, but supplied by Danfoss as part of a Danfoss Product, are not warranted by Danfoss, and Customer’s sole recourse if any such product should fail shall be under the warranty, if any, of such other manufacturer.

Fuses are warranted only when a defect or malfunction of the Product or its components are found to be the cause of the fuse failure. Customer’s sole and exclusive remedy against Danfoss and Danfoss’ only obligation, for breach of warranty, shall be, at Danfoss’ option, the repair or replacement (with either a refurbished or new Product) of any Product that on Danfoss’ examination is found to be defective at the time of delivery due to faulty workmanship and/or defective material, but only if the Customer submits a claim in writing to Danfoss within the warranty period. When making a warranty claim, the Customer must forward the Product to Danfoss in a manner to be agreed upon between Customer and Danfoss with a description of the reason for returning the Product. Freight and insurance will be paid by the Customer. If Danfoss’ determines that the Product is not defective due to faulty workmanship and/or defective material or that the warranty has been voided, the Product shall be returned to the Customer, if the Customer requests. In such case, freight and insurance shall be paid by the Customer. If Danfoss ascertains that the Product is defective due to faulty workmanship and/or defective material, Danfoss shall send the repaired Product or a replacement Product to the Customer. Danfoss may choose the method of delivery and will pay freight and insurance. Products or product parts which have been replaced shall be the property of and retained by Danfoss. The Customer is responsible for repackaging Products returned in suitable packing material to prevent damage in transit. Danfoss may elect to provide service personnel at Customer’s premises to affect Product repair or replacement covered by the terms of the warranty. Danfoss may pay for a portion or all of the travel time and expense for Products located in the 48 contiguous states, Hawaii and Alaska. For products located in the rest of Hawaii, Alaska, Canada and other countries, travel time and travel expenses will be billed to the Customer in U.S. dollars.

**Extended Warranties**

**FC202/FC302/FC322 STANDARD DEPOT REPAIR EXTENDED WARRANTY**

SIZE	2 YR	3 YEAR	4 YEAR	5 YEAR	6 YEAR
A FRAME	STANDARD	13OR1122	13OR1124	13OR1126	13OR1128
B FRAME	STANDARD	13OR1132	13OR1134	13OR1136	13OR1138
C FRAME	STANDARD	13OR1142	13OR1144	13OR1146	13OR1148
D FRAME	STANDARD	13OR1152	13OR1154	13OR1156	13OR1158
E FRAME	STANDARD	13OR1162	13OR1164	13OR1166	13OR1168
F FRAME	STANDARD	13OR1172	13OR1174	13OR1176	13OR1178

**MCD500 SOFT START STANDARD DEPOT REPAIR EXTENDED WARRANTY**

SIZE	2 YR	3 YEAR	4 YEAR	5 YEAR	6 YEAR
S1	STANDARD	13OR1132	13OR1134	13OR1136	13OR1138
S2	STANDARD	13OR1142	13OR1144	13OR1146	13OR1148
S3	STANDARD	13OR1152	13OR1154	13OR1156	13OR1158



**NOTES**

**Drive Protection Warranties**  
also includes the following coverage:

- \* Line anomalies - including lightening strikes
- \* Load anomalies
- \* Accidental exposure to moisture or corrosives
- \* Accidental collision or other physical damage

**FC202/FC302/FC322 DRIVE PROTECTION DEPOT EXTENDED WARRANTY**

SIZE	2 YR	3 YEAR	4 YEAR	5 YEAR	6 YEAR
A FRAME	130R2001	130R2003	130R2005	130R2007	130R2009
B FRAME	130R2011	130R2013	130R2015	130R2017	130R2019
C FRAME	130R2021	130R2023	130R2025	130R2027	130R2029
D FRAME	130R2031	130R2033	130R2035	130R2037	130R2039
E FRAME	130R2041	130R2043	130R2045	130R2047	130R2049
F FRAME	130R2051	130R2053	130R2055	130R2057	130R2059

**MCD500 SOFT START DRIVE PROTECTION DEPOT EXTENDED WARRANTY**

SIZE	2 YR	3 YEAR	4 YEAR	5 YEAR	6 YEAR
S1	130R2011	130R2013	130R2015	130R2017	130R2019
S2	130R2021	130R2023	130R2025	130R2027	130R2029
S3	130R2031	130R2033	130R2035	130R2037	130R2039

Total coverage from date of shipment from Mitchell Lewis & Staver Stock.

**Coverage Terms:**

Standard Service Warranty extends the standard product warranty. Coverage begins on the date of shipment from the manufacturer and extends to the end of the contract period. Drives are sent to Danfoss for evaluation and repair. Danfoss will return the drive to the customer freight prepaid if deemed in warranty. Pricing applies to drives installed in the 48 contiguous states, Hawaii and Alaska in U.S. dollars.



**NOTES**

**NOTES**





## **INNOVATIVE SOLUTIONS**

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