

Motor Starter Sizing Chart

INSTRUCTIONS:

1. VERIFY RUNNING VOLTAGE AND 1 OR 3 PHASE (208V VS 230V MATTERS)
2. DETERMINE HORSE POWER OF THE MOTOR AT YOUR VOLTAGE.
3. FIGURE OUT THE APPLICATION? ie PUMP, SAW, CRUSHER, GEAR MOTOR, ETC... and WOULD YOU CONSIDER THIS TO BE A LOAD REQUIRING A HEAVY DUTY STARTER. Parital list of heavy duty applications: VACUUM PUMP, DUST COLLECTOR, CRUSHER, AIR COMPRESSOR. CONSIDER A HEAVY DUTY APPLICATION TO BE - LONG STARTING TIME, FREQUENT STARTS AND STOPS, LONG TIME RUNNING AT 60% OF FLA.
4. DETERMINE THE CONTROL VOLTAGE (120V, 480V ETC). THE MOST COMMON SET UP IS TO USE THE SINGLE PHASE POWER OF YOUR SUPPLY VOLTAGE.
5. CHOOSE AN OVERLOAD SIZE THAT YOUR MOTOR AMPS FALL WITHIN. THIS COULD BE LISTED AS AMPS OR FULL LOAD AMPS (FLA). CONSIDER THE SERVICE FACTOR OR SERVICE FACTOR AMPS (SFL). EX. IF SERVICE FACTOR IS 1.15, THE MAXIMUM TRIP SETTING OF THE OVERLOAD SHOULD NEVER EXCEED 1.15 X AMPS.

MAIN VOLTAGE	OVERLOAD RANGE	MOTOR HP	COIL VOLTAGE	STARTER NEMA SIZE (IEC SIZE)	HEAVY DUTY(HD) OR STANDARD DUTY (SD)
460-480V	1-1.6 AMP	1/2	24V,24VDC,120V,230V,480V	00	HD
460-480V	1.6-2.5 AMP	3/4-1	24V,24VDC,120V,230V,480V	00	HD
460-480V	2.5-4 AMP	1.5-2	24V,24VDC,120V,230V,480V	00	HD
460-480V	4-6 AMP	3	24V,24VDC,120V,230V,480V	0	HD
460-480V	6-9 AMP	5	24V,24VDC,120V,230V,480V	0	HD
460-480V	9-13 AMP	7.5	24V,24VDC,120V,230V,480V	1	HD
460-480V	12-18 AMP	10	24V,24VDC,120V,230V,480V	1	SD
460-480V	12-18 AMP	10	24V,24VDC,120V,230V,480V	(22)	HD
460-480V	18-25 AMP	15	24V,24VDC,120V,230V,480V	1P	HD
460-480V	22-32 AMP	20	24V,24VDC,120V,230V,480V	1P	SD
460-480V	22-32 AMP	20	24V,24VDC,120V,230V,480V	2	HD
460-480V	28-40 AMP	25	24V,24VDC,120V,230V,480V	2	SD
460-480V	28-40 AMP	25	24V,24VDC,120V,230V,480V	(50)	HD
460-480V	34-50 AMP	30	24V,24VDC,120V,230V,480V	(50)	SD
460-480V	34-50 AMP	30	24V,24VDC,120V,230V,480V	(65)	HD
460-480V	45-65 AMP	40	24V,24VDC,120V,230V,480V	(65)	SD
460-480V	45-65 AMP	40	24V,24VDC,120V,230V,480V	(75)	HD
460-480V	45-65 AMP	40	24V,24VDC,120V,230V,480V	3	XHD
460-480V	54-75 AMP	50	24V,24VDC,120V,230V,480V	(75)	SD
460-480V	54-75 AMP	50	24V,24VDC,120V,230V,480V	3	HD
460-480V	54-75 AMP	50	24V,24VDC,120V,230V,480V	(100)	XHD
460-480V	63-85 AMP	60	24V,24VDC,120V,230V,480V	3	SD
460-480V	63-85 AMP	60	24V,24VDC,120V,230V,480V	(100)	HD
460-480V	70-95 AMP	60	24V,24VDC,120V,230V,480V	(100)	HD
460-480V	80-105 AMP	75	24V,24VDC,120V,230V,480V	(130)	HD
460-480V	80-105 AMP	75	24V,24VDC,120V,230V,480V	4	XHD
460-480V	95-130 AMP	100	24V,24VDC,120V,230V,480V	4	SD
460-480V	110-150 AMP	100	24V,24VDC,120V,230V,480V	4	SD
460-480V	100-160 AMP	100	24V,24VDC,120V,230V,480V	(225)	HD

MAIN VOLTAGE	OVERLOAD RANGE	MOTOR HP	COIL VOLTAGE	STARTER NEMA SIZE (IEC SIZE)	HEAVY DUTY(HD) OR STANDARD DUTY (SD)
208-230V	1.6-2.5 AMP	1/2	24V,24VDC,120V,230V,480V	00	HD
208-230V	2.5-4 AMP	3/4	24V,24VDC,120V,230V,480V	00	HD
208-230V	4-6 AMP	1	24V,24VDC,120V,230V,480V	0	HD
208-230V	6-9 AMP	1.5/2	24V,24VDC,120V,230V,480V	0	HD
208-230V	9-13 AMP	3	24V,24VDC,120V,230V,480V	1	HD
208-230V	12-18 AMP	5	24V,24VDC,120V,230V,480V	1	SD
208-230V	12-18 AMP	5	24V,24VDC,120V,230V,480V	(22)	HD
208-230V	18-25 AMP	7.5	24V,24VDC,120V,230V,480V	1P	SD
230V	22-32 AMP	10	24V,24VDC,120V,230V,480V	1P	SD
230V	22-32 AMP	10	24V,24VDC,120V,230V,480V	2	HD
208V	28-40 AMP	10	24V,24VDC,120V,230V,480V	2	SD
208V	28-40 AMP	10	24V,24VDC,120V,230V,480V	(50)	HD
208V	34-50 AMP	15	24V,24VDC,120V,230V,480V	(50)	SD
230V	34-50 AMP	15	24V,24VDC,120V,230V,480V	(50)	SD
208-230V	34-50 AMP	15	24V,24VDC,120V,230V,480V	(65)	HD
230V	45-65 AMP	20	24V,24VDC,120V,230V,480V	(65)	SD
208V	45-65 AMP	20	24V,24VDC,120V,230V,480V	(65)	LD
230V	45-65 AMP	20	24V,24VDC,120V,230V,480V	(75)	HD
230V	45-65 AMP	20	24V,24VDC,120V,230V,480V	3	XHD
208V	54-75 AMP	20	24V,24VDC,120V,230V,480V	(75)	SD
208V	54-75 AMP	20	24V,24VDC,120V,230V,480V	3	HD
230V	54-75 AMP	25	24V,24VDC,120V,230V,480V	(75)	SD
230V	54-75 AMP	25	24V,24VDC,120V,230V,480V	4	HD
230V	54-75 AMP	25	24V,24VDC,120V,230V,480V	(100)	XHD
208V	63-85 AMP	25	24V,24VDC,120V,230V,480V	4	SD
208V	63-85 AMP	25	24V,24VDC,120V,230V,480V	(100)	HD
230V	63-85 AMP	30	24V,24VDC,120V,230V,480V	3	SD
230V	63-85 AMP	30	24V,24VDC,120V,230V,480V	(100)	HD
208V	70-95 AMP	30	24V,24VDC,120V,230V,480V	(100)	SD
230V	70-95 AMP	30	24V,24VDC,120V,230V,480V	(100)	HD
208V	80-105 AMP	30	24V,24VDC,120V,230V,480V	(130)	XHD
230V	80-105 AMP	40	24V,24VDC,120V,230V,480V	(130)	SD
230V	95-130 AMP	40	24V,24VDC,120V,230V,480V	4	HD
208V	95-130 AMP	40	24V,24VDC,120V,230V,480V	(130)	SD
208V	110-150 AMP	40	24V,24VDC,120V,230V,480V	4	HD
230V	110-150 AMP	50	24V,24VDC,120V,230V,480V	4	SD
208V	110-150 AMP	50	24V,24VDC,120V,230V,480V	4	LD
208-230V	100-160 AMP	50	24V,24VDC,120V,230V,480V	(225)	HD

MAIN VOLTAGE	OVERLOAD RANGE	MOTOR HP	COIL VOLTAGE	STARTER NEMA SIZE (IEC SIZE)	HEAVY DUTY(HD) OR STANDARD DUTY (SD)
230V 1PH	4-6 AMP	1/2	24V,24VDC,120V,230V,480V	0	HD
230V 1PH	6-9 AMP	3/4	24V,24VDC,120V,230V,480V	0	HD
230V 1PH	9-13 AMP	1.5/2	24V,24VDC,120V,230V,480V	1	HD
230V 1PH	12-18 AMP	3	24V,24VDC,120V,230V,480V	1	SD
230V 1PH	12-18 AMP	3	24V,24VDC,120V,230V,480V	(22)	HD
230V 1PH	18-25 AMP	5	24V,24VDC,120V,230V,480V	1P	SD
230V 1PH	22-32 AMP	5	24V,24VDC,120V,230V,480V	1P	SD
230V 1PH	22-32 AMP	5	24V,24VDC,120V,230V,480V	2	HD
230V 1PH	28-40 AMP	7.5	24V,24VDC,120V,230V,480V	2	LD
230V 1PH	34-50 AMP	7.5	24V,24VDC,120V,230V,480V	(50)	HD
230V 1PH	34-50 AMP	10	24V,24VDC,120V,230V,480V	(50)	SD
230V 1PH	45-65 AMP	10	24V,24VDC,120V,230V,480V	(50)	SD
230V 1PH	45-65 AMP	10	24V,24VDC,120V,230V,480V	(65)	HD
230V 1PH	54-75 AMP	15	24V,24VDC,120V,230V,480V	(75)	SD
230V 1PH	54-75 AMP	15	24V,24VDC,120V,230V,480V	4	HD
230V 1PH	54-75 AMP	15	24V,24VDC,120V,230V,480V	(100)	XHD