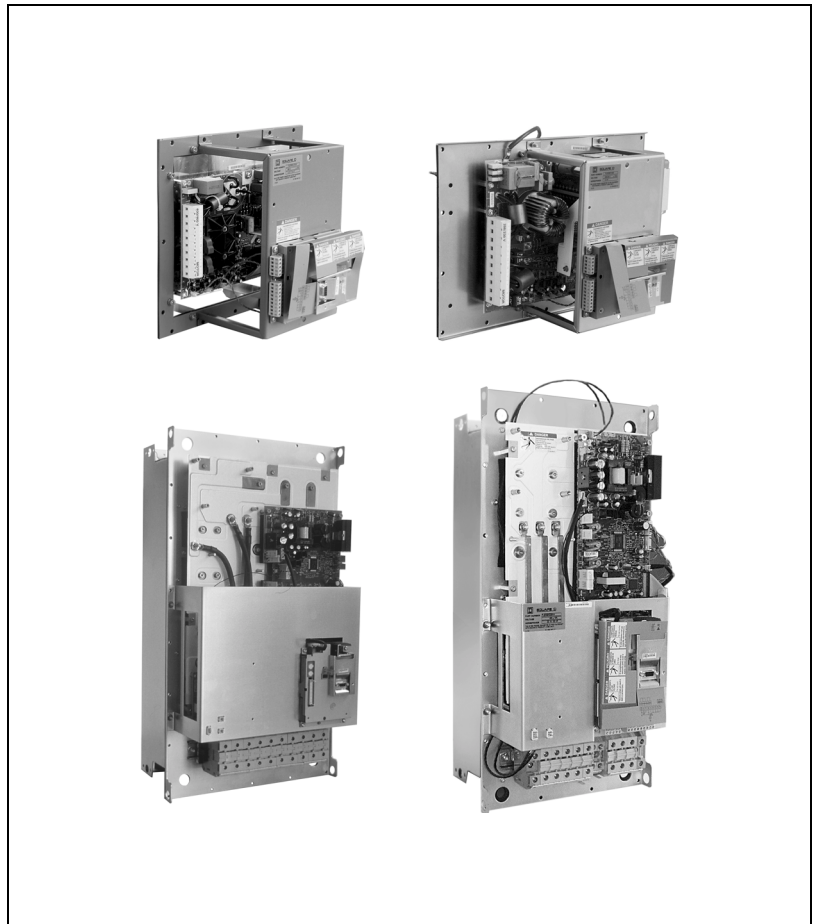


ALTIVAR® FLEX58 Chassis Drive Controller

Product Selection

Class 8806



Schneider Electric Brands

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SQUARE D
Schneider Electric

ALTIVAR® FLEX58 Chassis Drive Controller

General Information and Selection

GENERAL INFORMATION

The ALTIVAR FLEX58 chassis drive controller family is used to control three-phase asynchronous motors. The purchaser is responsible for mounting and installing the chassis drive controller inside an enclosure.

When selecting a FLEX58 chassis drive controller and its companion parts, each component is ordered separately.

The following components are required for installation:

- the FLEX58 chassis drive controller, see pages 4–6 for the catalog number
- the proper heatsink fan kit for the controller, for heatsink cooling, see the table below for the catalog number
- a keypad display (catalog no. VW3A58101U), for programming and viewing parameters on the controller

In addition, you can order the following options:

- 0–10 V to 4–20 mA DC Converter (catalog no. 31158-297-50): An optional board that plugs into and extends the drive controller control terminals. Converts a 0–10 Vdc to 4–20 mA dc speed reference signal for use with AI2. Use when the application has an HOA (hand/off/auto) switch with a speed potentiometer and 0–10 V speed reference signal.
- Remote Mount Cable for the keypad display (catalog no. VW3A58103): for mounting the keypad display on a surface away from the keypad display port on the drive controller. Includes cable, cover, seals for a Type 12 enclosure, and an instruction bulletin.

CONTROLLER SELECTION

To identify the proper component catalog numbers, select one option in each appropriate row of the following table.

Category	Choices	
Product	FLEX58 Chassis Drive	
Torque	Variable or Constant	
Voltage	208 V, 230 V, or 460 V	
Horsepower	208/230 V	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50*
	460 V	1, 2, 3, 5, 7.5, 10, 15, 20, 25, 30, 40, 50, 60, 75, 100*

* Variable torque only at this horsepower.

Heatsink Fan Kits

FLEX58 Chassis Controller		Catalog No.
208/230 V	460 V	
FLEX58U29M2, FLEX58U41M2, FLEX58U72M2	FLEX58KU18N4, FLEX58KU29N4, FLEX58KU41N4, FLEX58KU54N4, FLEX58KU72N4	N/A
FLEX58U90M2, FLEX58D12M2	FLEX58KU90N4, FLEX58KD12N4, FLEX58KD16N4, FLEX58KD23N4	31158-296-50
FLEX58D16M2, FLEX58D23M2	FLEX58KD28N4, FLEX58KD33N4, FLEX58KD46N4	31158-296-51
FLEX58D28M2, FLEX58D33M2, FLEX58D46M2	FLEX58KD54N4, FLEX58KD64N4, FLEX58KD79N4	31158-296-52



ALTIVAR® FLEX58 Chassis Drive Controller Specifications

SPECIFICATIONS

Enclosure type	FLEX58 chassis drive controller is IP00. Purchaser installation inside an enclosure.
Resistance to vibrations	According to IEC 60068-2-6: 1.5 mm zero to peak from 3 to 13 Hz 1 gn from 13 to 200 Hz
Resistance to shocks	According to IEC 60068-2-27: 15 g, 11 ms
Ambient pollution degree	FLEX58U29M2–D12M2 and FLEX58KU18N4–D23N4: Pollution degree 2 conforming to IEC 60664-1, EN50718, and NEMA ICS-1. FLEX58D16M2–D46M2 and FLEX58KD28N4–D79N4: Pollution degree 3 according to IEC 60664-1, EN50718, and NEMA ICS-1. Protect the drive controller against dust, corrosive gas, and falling liquid.
Maximum relative humidity	95% maximum, non-condensing and without dripping according to IEC 60068-2-3. Provide a heating system if there is possible condensation.
User-supplied enclosure maximum ambient temperature	Storage: -13 to +149 °F (-25 to +65 °C) Operation: +14 to +104 °F (-10 to +40 °C)
Altitude	3300 ft (1000 m) maximum without derating; derate the output current by 1% for each additional 330 ft (100 m)
Operational position	Vertical, ±10°, with heatsink fins vertical.
Input voltage	208 V ±10% 230 V ±10% 460 V ±10%
Input frequency	60 Hz ±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)
Output frequency	0.1 to 500 Hz (factory setting of 60 Hz maximum)
Switching frequency	All FLEX58 chassis drive controllers ship from the factory set for variable torque at 8 kHz. The ratings published in this instruction bulletin and listed on the nameplate are based on: Variable torque at 8 kHz Constant torque at 4 kHz Above the listed rating, select the next largest size chassis drive controller. If the duty cycle does not exceed 60% (36 seconds maximum for a 60 second cycle), this is not necessary.
Speed range	1:100 open loop (for example 0.6 Hz to 60 Hz or 5 Hz to 500 Hz)
Speed regulation	1% of rated motor speed without adjustments or feedback. ±0.1% of rated motor speed with optional analog I/O card and appropriate tachometer feedback. ±0.02% of rated motor speed with optional digital I/O card and appropriate encoder feedback.
Efficiency	97% at full load typical.
Displacement power factor	98% through speed range.
Motor control algorithm	Sensorless flux vector control with a pulse width modulated (PWM) output wave form.
DC injection braking	Automatically on stopping as soon as frequency drops below 0.1 Hz for 0.5 seconds.
Braking torque	30% of nominal motor torque without dynamic braking (typical value). Up to 150% with the dynamic braking option.
Transient output current	160% of nominal NEC rated motor current for 60 seconds (for constant torque ratings). 110% of nominal motor current for 60 seconds (for variable torque ratings).
Transient motor torque	200% of nominal motor torque (typical value at ±10%) for 2 seconds. 170% of nominal motor torque (typical value at ±10%) for 60 seconds.
Drive controller protection	Protection against short circuits: <ul style="list-style-type: none"> • between output phases • between output phases and ground • on outputs of internal supplies Thermal protection against overheating and overcurrent. Undervoltage and overvoltage faults. Protection against single-phase input operation on the three-phase drive controllers.
Motor protection	Thermal protection integrated in the drive controller by continuous calculation of I ² t, taking motor speed into account. ^[1] Motor thermal state is retained during loss of power. Motor thermal protection can be modified with a programming option to correspond to the type of motor cooling. Protection against motor phase loss. Protection by motor thermal sensors with analog option card.
Codes and standards	UL Listed per UL 508C cUL certified Conforms to applicable NEMA ICS, NFPA, IEC, and ISO 9001 standards.
[1] Motor thermal protection can be set between 25 and 136% of the drive controller rating.	



ALTIVAR® FLEX58 Chassis Drive Controller Ratings

RATINGS

Ratings for FLEX58 Constant Torque, 208 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 4 kHz

Drive Controller Catalog Number	Motor Power 208 V	Rated Output Current ^[1]	Transient Output Current	Dissipated Power from the Controller Heatsink at Rated Load	Dissipated Power from the Control Boards at Rated Load
	hp	A	A	W	W
FLEX58U29M2	1	4.6	7.4	35.5	17.5
FLEX58U29M2	2	7.5	12	71.7	35.3
FLEX58U41M2	3	10.6	17	107.2	52.8
FLEX58U72M2	5	16.7	26.7	160.8	79.2
FLEX58U90M2	7.5	24.2	38.7	170.8	84.2
FLEX58D12M2	10	30.8	49.3	234.5	115.5
FLEX58D16M2	15	46.2	73.9	560.6	184.4
FLEX58D23M2	20	59.4	94	673.5	221.5
FLEX58D28M2	25	74.8	119.7	677.2	222.8
FLEX58D33M2	30	88	140.8	775.1	254.9
FLEX58D46M2	40	114	182.4	989.5	325.5

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.

Ratings for FLEX58 Constant Torque, 230 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 4 kHz

Drive Controller Catalog Number	Motor Power 230 V	Rated Output Current ^[1]	Transient Output Current	Dissipated Power from the Controller Heatsink at Rated Load	Dissipated Power from the Control Boards at Rated Load
	hp	A	A	W	W
FLEX58U29M2	1	4.2	6.7	35.5	17.5
FLEX58U29M2	2	6.8	10.9	71.7	35.3
FLEX58U41M2	3	9.6	15.4	107.2	52.8
FLEX58U72M2	5	15.2	24.3	160.8	79.2
FLEX58U90M2	7.5	22	35.2	170.8	84.2
FLEX58D12M2	10	28	44.8	234.5	115.5
FLEX58D16M2	15	42	67.2	560.6	184.4
FLEX58D23M2	20	54	86.4	673.5	221.5
FLEX58D28M2	25	68	108.8	677.2	222.8
FLEX58D33M2	30	80	128	775.1	254.9
FLEX58D46M2	40	104	166.4	989.5	325.5

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.



ALTIVAR® FLEX58 Chassis Drive Controller Ratings

Ratings for FLEX58 Variable Torque, 208 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 8 kHz

Drive Controller Catalog Number	Motor Power 208 V hp	Rated Output Current ^[1] A	Transient Output Current A	Dissipated Power from the Controller Heatsink at Rated Load W	Dissipated Power from the Control Boards at Rated Load W
FLEX58U29M2	1	4.6	5.1	35.5	17.5
FLEX58U29M2	2	7.5	8.3	71.7	35.3
FLEX58U41M2	3	10.6	11.7	105.9	52.1
FLEX58U72M2	5	16.7	18.4	132.7	65.3
FLEX58U90M2	7.5	24.2	26.6	157.4	77.6
FLEX58D12M2	10	30.8	33.9	216.4	106.6
FLEX58D16M2	15	46.2	50.8	413.9	136.1
FLEX58D16M2	20	59.4	65.3	560.6	184.4
FLEX58D23M2	25	74.8	82.3	673.5	221.5
FLEX58D28M2	30	88	96.8	677.2	222.8
FLEX58D33M2	40	114	125.4	775.1	254.9
FLEX58D46M2	50	143	157.3	989.5	325.5

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.

Ratings for FLEX58 Variable Torque, 230 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 8 kHz

Drive Controller Catalog Number	Motor Power 230 V hp	Rated Output Current ^[1] A	Transient Output Current A	Dissipated Power from the Controller Heatsink at Rated Load W	Dissipated Power from the Control Boards at Rated Load W
FLEX58U29M2	1	4.2	4.6	35.5	17.5
FLEX58U29M2	2	6.8	7.5	71.7	35.3
FLEX58U41M2	3	9.6	10.5	105.9	52.1
FLEX58U72M2	5	15.2	16.7	132.7	65.3
FLEX58U90M2	7.5	22	24.2	157.4	77.6
FLEX58D12M2	10	28	30.8	216.4	106.6
FLEX58D16M2	15	42	46.2	413.9	136.1
FLEX58D16M2	20	54	59.4	560.6	184.4
FLEX58D23M2	25	68	74.8	673.5	221.5
FLEX58D28M2	30	80	88	677.2	222.8
FLEX58D33M2	40	104	114.4	775.1	254.9
FLEX58D46M2	50	130	143	989.5	325.5

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.



ALTIVAR® FLEX58 Chassis Drive Controller Ratings

Ratings for FLEX58 Constant Torque, 460 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 4 kHz

Drive Controller Catalog Number	Motor Power 460 V	Rated Output Current ^[1]	Transient Output Current	Dissipated Power from the Controller Heatsink at Rated Load	Dissipated Power from the Control Boards at Rated Load
	hp	A	A	W	W
FLEX58KU18N4	1	2.1	3.4	38.2	18.8
FLEX58KU29N4	2	3.4	5.4	65	32.0
FLEX58KU41N4	3	4.8	7.7	80.4	39.6
FLEX58KU72N4	5	7.6	12.2	140.7	69.3
FLEX58KU90N4	7.5	11	17.6	197.6	97.4
FLEX58KD12N4	10	14	22.4	241.2	118.8
FLEX58KD16N4	15	21	33.6	321	158.4
FLEX58KD23N4	20	27	43.2	395.3	194.7
FLEX58KD28N4	25	34	54.4	316.8	104.2
FLEX58KD33N4	30	40	64	369.5	121.5
FLEX58KD46N4	40	52	83.2	470.3	154.7
FLEX58KD54N4	50	65	104	509.4	167.6
FLEX58KD64N4	60	77	123.2	629.8	207.2
FLEX58KD79N4	75	96	153.6	820.2	269.8

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.

Ratings for FLEX58 Constant Torque, 460 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 8 kHz

Drive Controller Catalog Number	Motor Power 460 V	Rated Output Current ^[1]	Transient Output Current	Dissipated Power from the Controller Heatsink at Rated Load	Dissipated Power from the Control Boards at Rated Load
	hp	A	A	W	W
FLEX58KU18N4	1	2.1	2.3	38.2	18.8
FLEX58KU29N4	2	3.4	3.7	65	32.0
FLEX58KU41N4	3	4.8	5.3	79.7	39.3
FLEX58KU54N4	5	7.6	8.4	140	69.0
FLEX58KU72N4	7.5	11	12.1	195	96.0
FLEX58KU90N4	10	14	15.4	235.8	116.2
FLEX58KD12N4	15	21	23.1	316.2	155.8
FLEX58KD16N4	20	27	29.7	391.3	192.7
FLEX58KD23N4	25	34	37.4	438.2	215.8
FLEX58KD28N4	30	40	44.0	465	153.0
FLEX58KD33N4	40	52	57.2	536.5	176.5
FLEX58KD46N4	50	65	71.5	579.4	190.6
FLEX58KD54N4	60	77	84.7	742.7	244.3
FLEX58KD64N4	75	96	105.6	808.9	266.1
FLEX58KD79N4	100	124	136.4	1082.8	356.2

[1] The FLEX58 chassis drive controller nameplate rating is per NEC table 430-150.



ALTIVAR® FLEX58 Chassis Drive Controller Ratings

NOTE: The input conductor ampacity rating should not be less than the ampacity rating selected based on the rated controller output current.

INPUT LINE CURRENTS

Ratings for Input Line Currents, Constant Torque, 208/230 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 4 kHz

Drive Controller Catalog Number	Motor Power 208/230 V hp	Rated Output Current		Input Line Current 5000 AIC	
		208 V A	230 V A	208 V A	230 V A
FLEX58U29M2	1	4.6	4.2	4.9	4.3
FLEX58U29M2	2	7.5	6.8	9.7	8.3
FLEX58U41M2	3	10.6	9.6	13.4	11.4
FLEX58U72M2	5	16.7	15.2	22.4	19.5
FLEX58U90M2	7.5	24.2	22	30	26.4
FLEX58D12M2	10	30.8	28	39.7	35
FLEX58D16M2	15	46.2	42	42.4	43.1
FLEX58D23M2	20	59.4	54	58	58.5
FLEX58D28M2	25	74.8	68	70.2	70.4
FLEX58D33M2	30	88	80	82.3	82.7
FLEX58D46M2	40	114	104	100.8	102.2

Ratings for Input Line Currents, Variable Torque, 208/230 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 8 kHz

Drive Controller Catalog Number	Motor Power 208/230 V hp	Rated Output Current		Input Line Current 5000 AIC	
		208 V A	230 V A	208 V A	230 V A
FLEX58U29M2	1	4.6	4.2	5.3	4.9
FLEX58U29M2	2	7.5	6.8	9.4	8.6
FLEX58U41M2	3	10.6	9.6	13	11.8
FLEX58U72M2	5	16.7	15.2	21.4	19.5
FLEX58U90M2	7.5	24.2	22	29	26.4
FLEX58D12M2	10	30.8	28	38.3	35
FLEX58D16M2	15	46.2	42	42.7	39
FLEX58D16M2	20	59.4	54	55.5	50.5
FLEX58D23M2	25	74.8	68	67	61.8
FLEX58D28M2	30	88	80	80.5	73.3
FLEX58D33M2	40	114	104	107.6	97.9
FLEX58D46M2	50	143	130	134.8	121.2



ALTIVAR® FLEX58 Chassis Drive Controller Ratings

NOTE: The input conductor ampacity rating should not be less than the ampacity rating selected based on the rated controller output current.

Ratings for Input Line Currents, Constant Torque, 460 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 4 kHz

Drive Controller Catalog Number	Motor Power 460 V	Rated Output Current	Input Line Current 5000 AIC, 460 V
	hp	A	A
FLEX58KU18N4	1	2.1	2.6
FLEX58KU29N4	2	3.4	4.5
FLEX58KU41N4	3	4.8	6
FLEX58KU72N4	5	7.6	10.1
FLEX58KU90N4	7.5	11	13.2
FLEX58KD12N4	10	14	18.2
FLEX58KD16N4	15	21	25.3
FLEX58KD23N4	20	27	32
FLEX58KD28N4	25	34	38.3
FLEX58KD33N4	30	40	44.8
FLEX58KD46N4	40	52	59.9
FLEX58KD54N4	50	65	71.4
FLEX58KD64N4	60	77	84.8 ^[1]
FLEX58KD79N4	75	96	103.3 ^[1]

^[1] 10 kAIC

Ratings for Input Line Currents, Variable Torque, 460 Vac Three-Phase Input with Three-Phase Output, Switching Frequency at 8 kHz

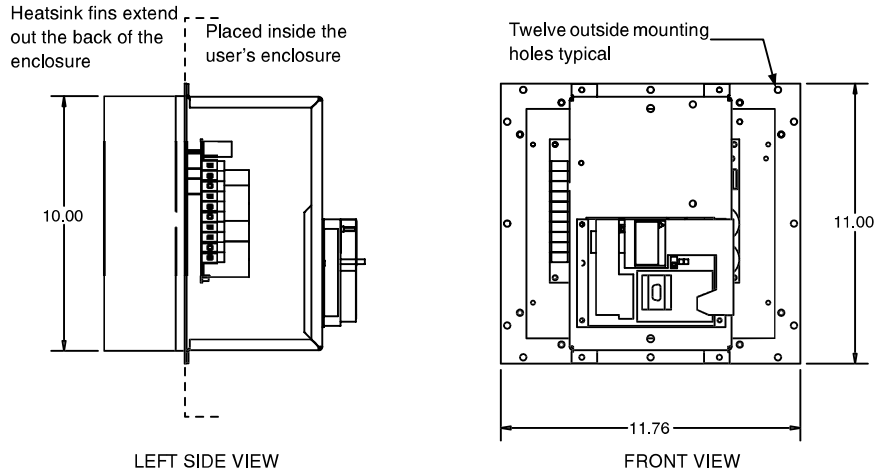
Drive Controller Catalog Number	Motor Power 460 V	Rated Output Current	Input Line Current 5000 AIC, 460 V
	hp	A	A
FLEX58KU18N4	1	2.1	2.8
FLEX58KU29N4	2	3.4	4.8
FLEX58KU41N4	3	4.8	6.5
FLEX58KU54N4	5	7.6	10
FLEX58KU72N4	7.5	11	14.3
FLEX58KU90N4	10	14	18.1
FLEX58KD12N4	15	21	25.8
FLEX58KD16N4	20	27	32.4
FLEX58KD23N4	25	34	38.9
FLEX58KD28N4	30	40	38.1
FLEX58KD33N4	40	52	49.3
FLEX58KD46N4	50	65	61.8
FLEX58KD54N4	60	77	75.2 ^[1]
FLEX58KD64N4	75	96	96.3 ^[1]
FLEX58KD79N4	100	124	122.6 ^[1]

^[1] 10 kAIC



ALTIVAR® FLEX58 Chassis Drive Controller Dimensions

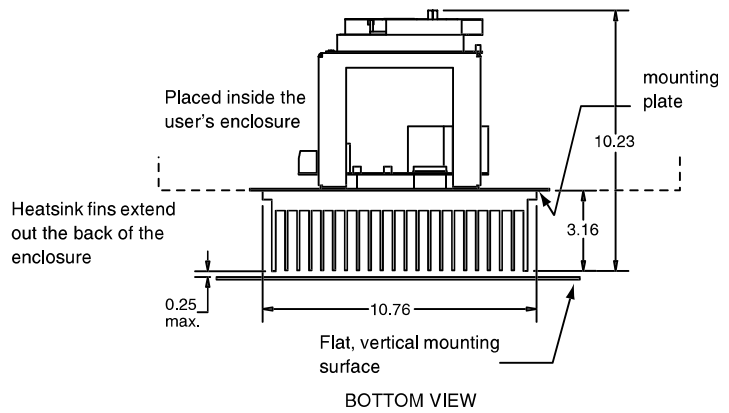
FLEX58 CHASSIS DRIVE CONTROLLER DIMENSIONS



Chassis Drive Controllers

FLEX58U29M2
 FLEX58U41M2
 FLEX58U72M2
 FLEX58KU18N4
 FLEX58KU29N4
 FLEX58KU41N4
 FLEX58KU54N4
 FLEX58KU72N4

Dimensions are in inches

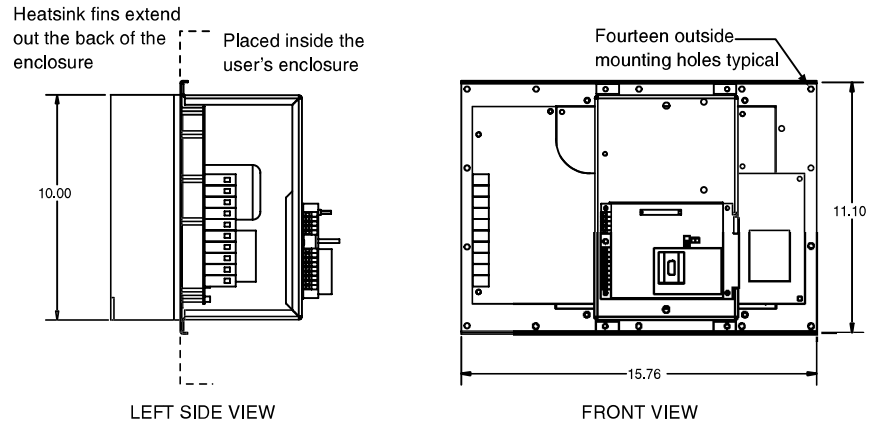


Dimensions for FLEX58U29M2–U72M2 and FLEX58KU18N4–KU72N4



ALTIVAR® FLEX58 Chassis Drive Controller

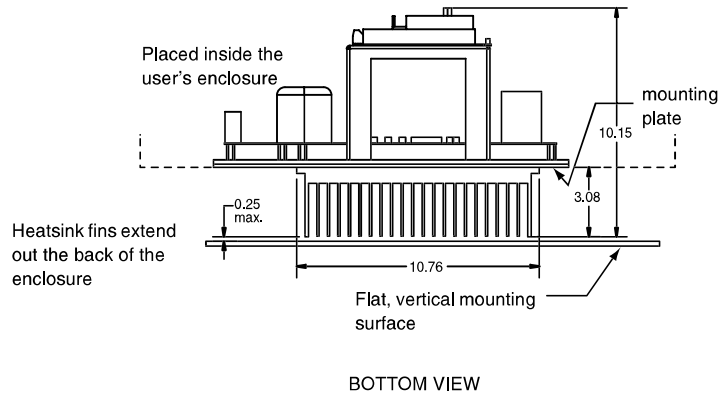
Dimensions



Chassis Drive Controllers

- FLEX58U90M2
- FLEX58D12M2
- FLEX58KU90N4
- FLEX58KD12N4
- FLEX58KD16N4
- FLEX58KD23N4

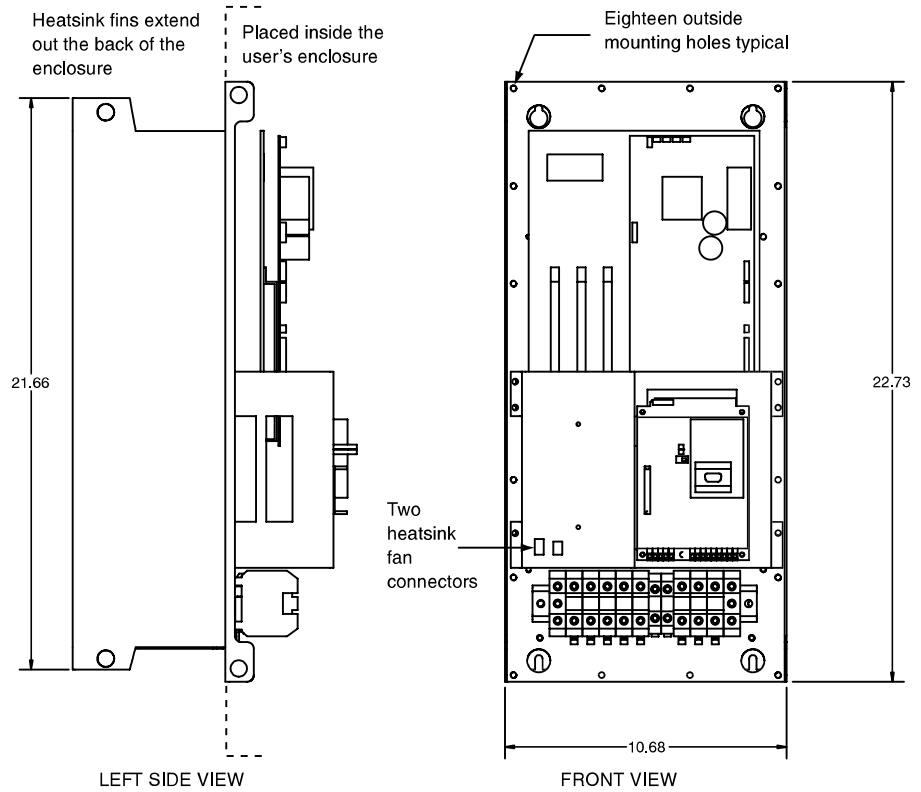
Dimensions are in inches



Dimensions for FLEX58U90M2, FLEX58D12M2, and FLEX58KU90N4–KD23N4



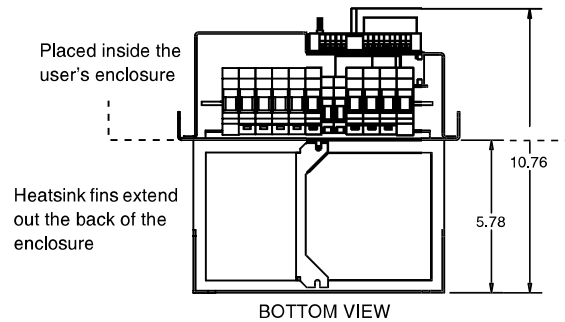
ALTIVAR® FLEX58 Chassis Drive Controller Dimensions



Chassis Drive Controllers

FLEX58D16M2
 FLEX58D23M2
 FLEX58KD28N4
 FLEX58KD33N4
 FLEX58KD46N4

Dimensions are in inches

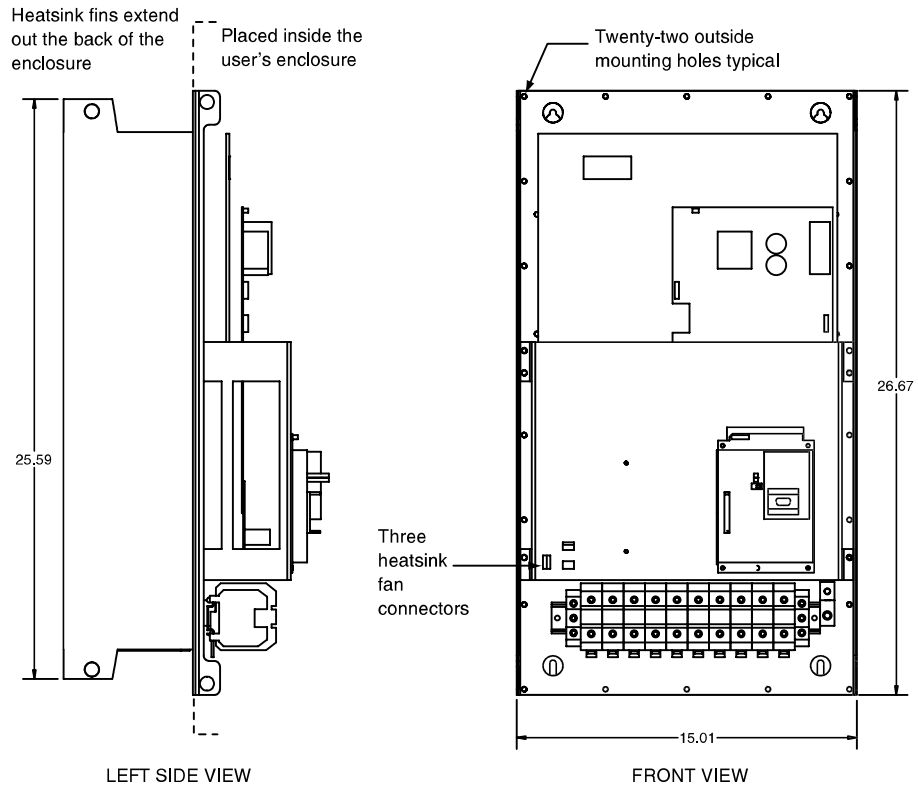


Dimensions for FLEX58D16M2, FLEX58D23M2, and FLEX58KD28N4–KD46N4



ALTIVAR® FLEX58 Chassis Drive Controller

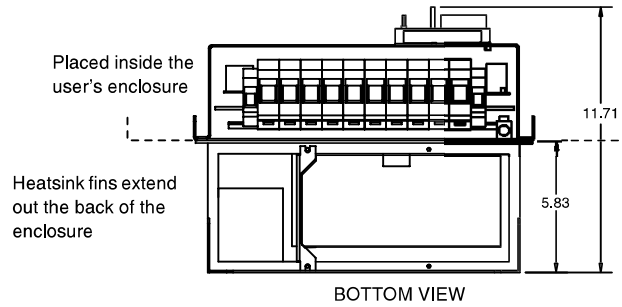
Dimensions and Weights



Chassis Drive Controllers

- FLEX58D28M2
- FLEX58D33M2
- FLEX58D46M2
- FLEX58KD54N4
- FLEX58KD64N4
- FLEX58KD79N4

Dimensions are in inches



Dimensions for FLEX58D28M2–D46M2 and FLEX58KD54N4–KD79N4

Weights

FLEX58 Drive Controllers with the following Heatsink Fan Kit	Heatsink Fan Kit Weight lbs	Drive Controller Weight lbs
No fan kit	N/A	20
31158-296-50	3.4	30
31158-296-51	3.6	70
31158-296-52	5.2	122

0–10 V converter, catalog no. 31158-297-50, weighs 1 lb.



ALTIVAR® FLEX58 Chassis Drive Controller Mounting Information

MOUNTING

Mounting in a General Purpose Metal Enclosure

Follow the installation precautions given in instruction bulletin 30072-450-47.

- Provide cutout and mounting holes for the FLEX58 drive controller and heatsink fan assembly. Refer to pages 14–17.
- If the enclosure does not provide sufficient free air flow, a stirring fan may be required. The stirring fan should provide a fan flow rate greater than or equal to 105 CFM. Pages 14–17 show suggested stirring fan locations for customer use.

If there is a possibility of condensation, keep the control supply switched on during periods when the motor is not running, or install thermostatically controlled space heaters.

Mounting in a Type 12 or IP54 Metal Enclosure

Certain conditions such as dust, corrosive gas, high humidity with the risk of condensation, and dripping water may require Type 12 or IP54 protection.

When mounting the controller in a Type 12 or IP54 enclosure, follow the installation precautions in instruction bulletin 30072-450-47.

1. Provide cutout and mounting holes for the FLEX58 drive controller and heatsink fan assembly. Refer to pages 14–17.
2. Install a gasket (supplied in the heatsink fan kit) on the enclosure for the heatsink fan assembly. Refer to instruction bulletin 30072-450-46 that ships with the heatsink fan kit.
3. Install the four rubber sealing plugs included in the heatsink fan kit into the four corners of the chassis drive controller. For plug locations refer to instruction bulletin 30072-450-47.
4. To prevent hot spots in the drive controller, use a stirring fan to circulate the air inside the enclosure. For suggested stirring fan locations refer to pages 14–17. The stirring fan should provide a fan flow rate greater than or equal to 105 CFM. The maximum allowable temperature inside the enclosure is 60 °C. Derate the current used by 2.2% per °C above 40 °C for enclosure ambient temperatures. If there is the possibility of condensation, keep the power supply switched on during periods when the motor is not running, or install thermostatically controlled strip heaters.

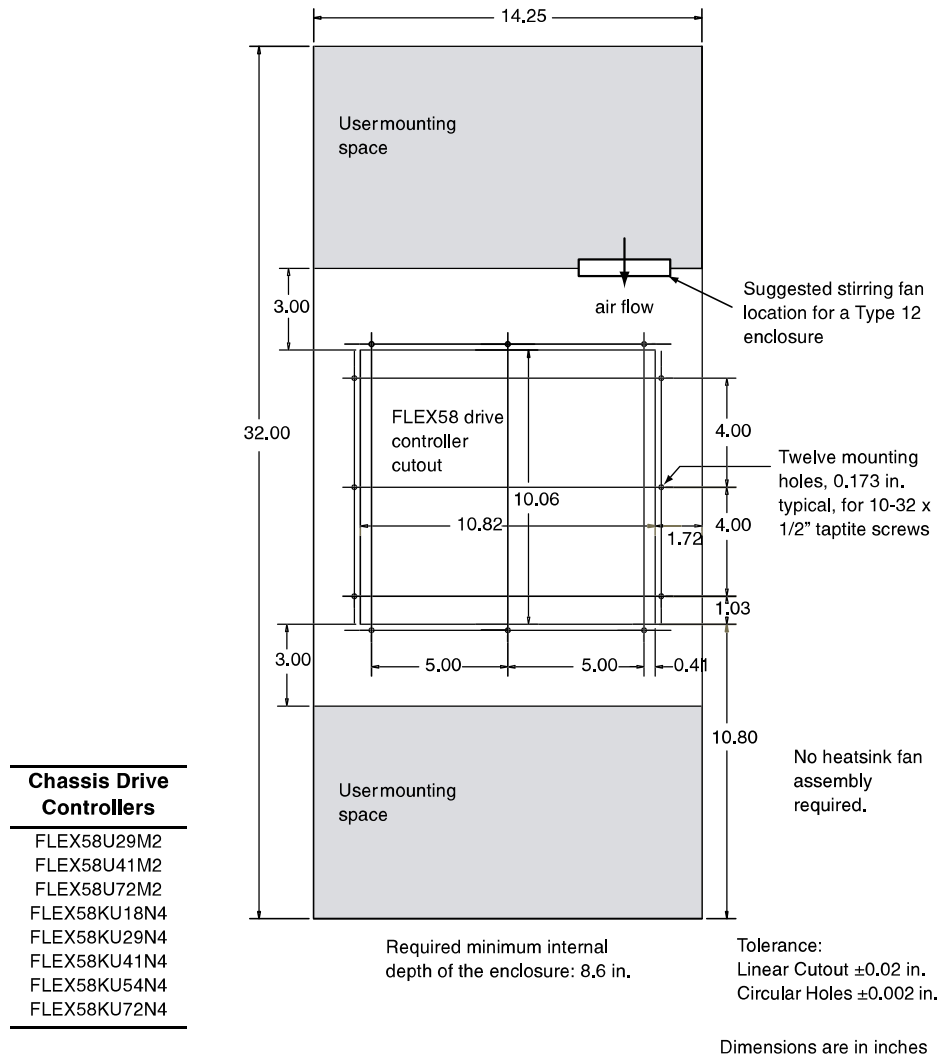
Calculating Enclosure Size

Minimum enclosure dimensions are shown on pages 14–17. Refer to pages 4–6 for chassis drive controller dissipated watts.



ALTIVAR® FLEX58 Chassis Drive Controller Mounting Dimensions

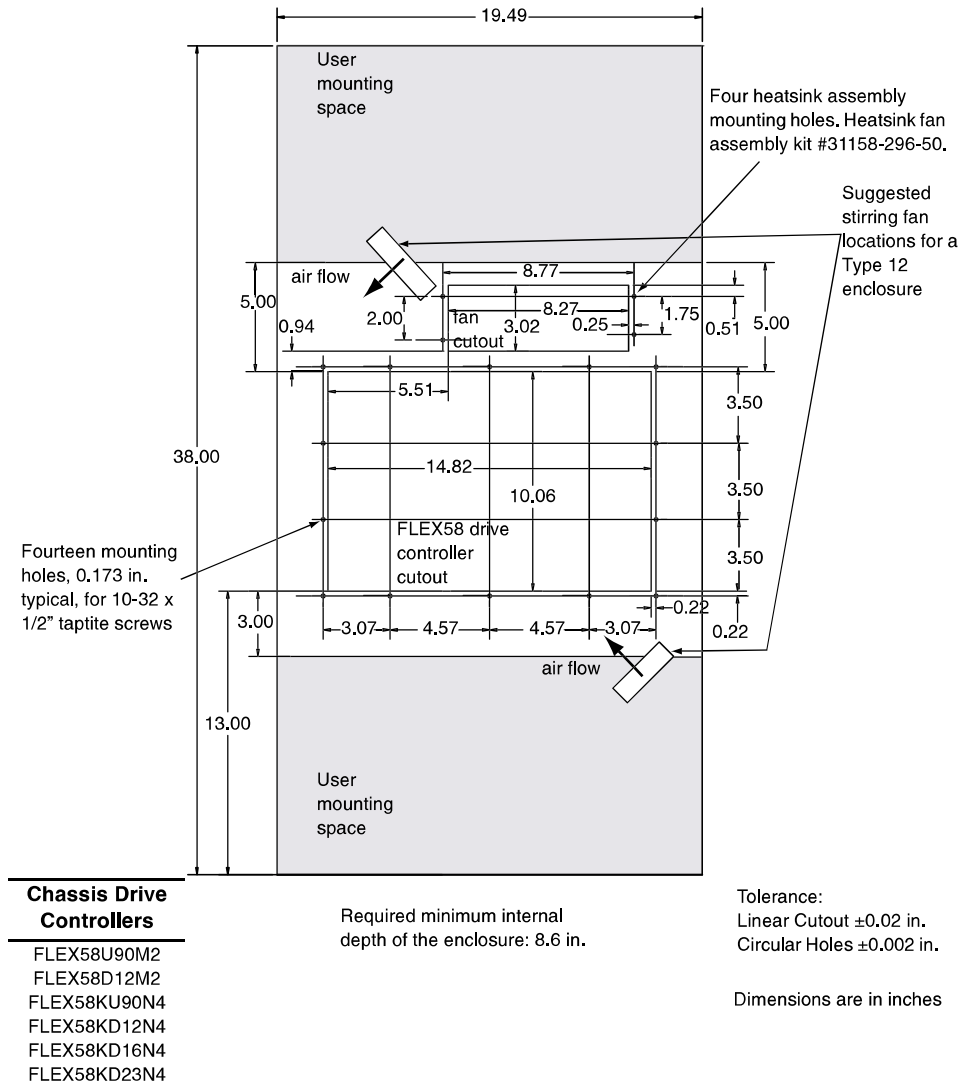
INSTALLATION CUTOUT AND MOUNTING HOLE DIMENSIONS



Mounting Dimensions for FLEX58U29M2–U72M2 and FLEX58KU18N4–KU72N4



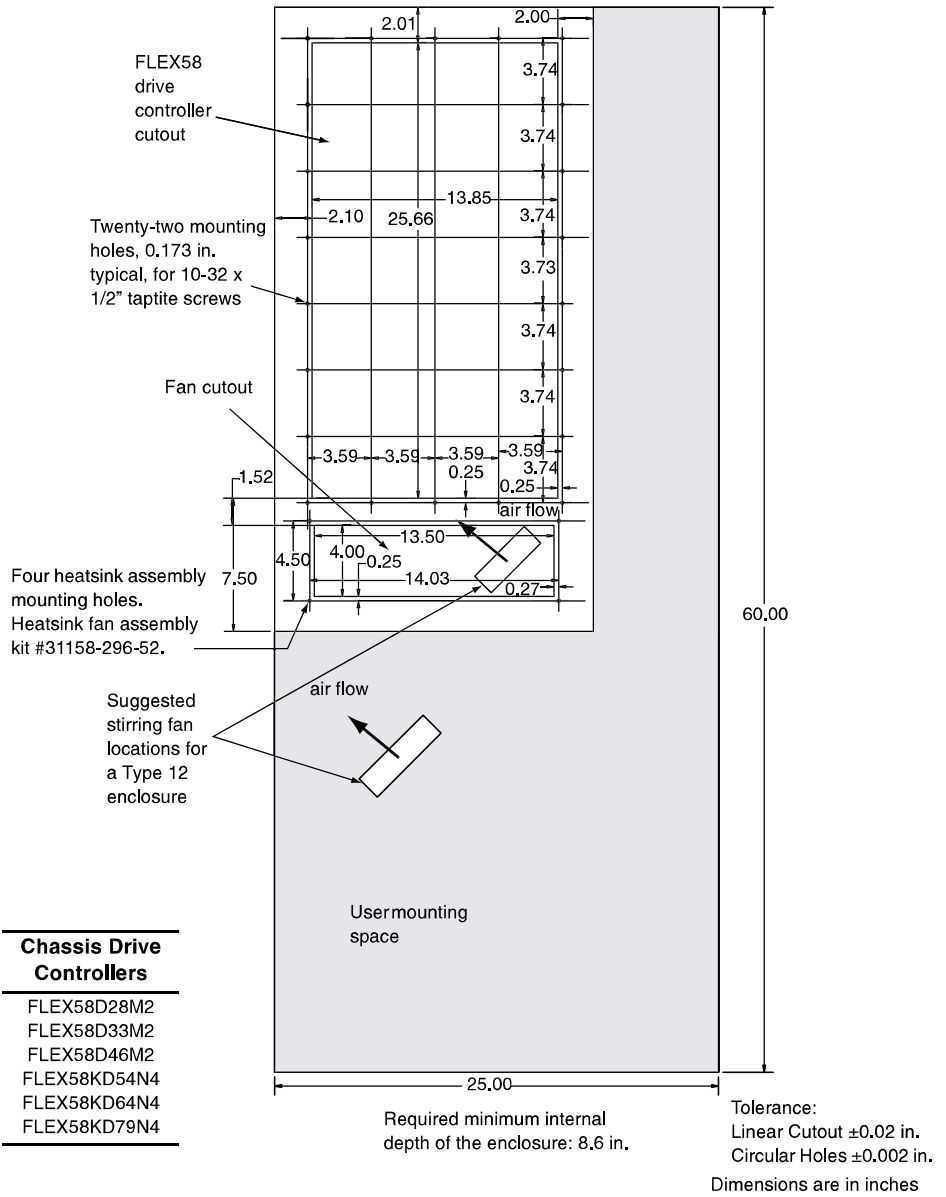
ALTIVAR® FLEX58 Chassis Drive Controller Mounting Dimensions



Mounting Dimensions for FLEX58U90M2, FLEX58D12M2, and FLEX58KU90N4-KD23N4



ALTIVAR® FLEX58 Chassis Drive Controller Mounting Dimensions



Mounting Dimensions for FLEX58D28M2–D46M2 and FLEX58KD54N4–KD79N4



ALTIVAR® FLEX58 Chassis Drive Controller

Circuit Breakers and Fuses

RECOMMENDED CIRCUIT BREAKERS OR FUSES

The FLEX58 chassis drive controller is rated for use with a circuit breaker or fuses. Refer to the tables below for circuit breaker part numbers, and fuse sizing.

Circuit Breaker or Fuse Selections for 208/230 V Constant Torque Chassis Drive Controllers

Chassis Drive Controllers	hp	Circuit Breaker		F1-F2-F3 Fuses ^[1]
		208 V	230 V	
FLEX58U29M2	1	GJL36007M02	GJL36007M02	15
FLEX58U29M2	2	GJL36015M03	GJL36015M03	15
FLEX58U41M2	3	GJL36030M04	GJL36030M04	20
FLEX58U72M2	5	GJL36030M04	GJL36030M04	35
FLEX58U90M2	7.5	GJL36050M05	GJL36050M05	60
FLEX58D12M2	10	GJL36075M06	GJL36050M05	70
FLEX58D16M2	15	GJL36075M06	GJL36075M06	70
FLEX58D23M2	20	FAL36100-18M	GJL36075M06	90
FLEX58D28M2	25	FAL36100-18M	FAL36100-18M	110
FLEX58D33M2	30	KAL36250-25M	FAL36150-24M	125
FLEX58D46M2	40	KAL36250-26M	KAL36250-26M	175

^[1] Input power fuses are Class J or Class T fast-acting. Class CC fuses may be used if the recommended fuse rating is 30 A or lower.

Circuit Breaker or Fuse Selections for 208/230 V Variable Torque Chassis Drive Controllers

Chassis Drive Controllers	hp	Circuit Breaker		F1-F2-F3 Fuses ^[1]
		208 V	230V	
FLEX58U29M2	1	GJL36007M02	GJL36007M02	15
FLEX58U29M2	2	GJL36015M03	GJL36015M03	15
FLEX58U41M2	3	GJL36030M04	GJL36030M04	20
FLEX58U72M2	5	GJL36030M04	GJL36030M04	35
FLEX58U90M2	7.5	GJL36050M05	GJL36050M05	60
FLEX58D12M2	10	GJL36075M06	GJL36050M05	70
FLEX58D16M2	15	GJL36075M06	GJL36075M06	70
FLEX58D16M2	20	FAL36100-18M	GJL36075M06	90
FLEX58D23M2	25	FAL36100-18M	FAL36100-18M	125
FLEX58D28M2	30	KAL36250-25M	KAL36250-25M	150
FLEX58D33M2	40	KAL36250-26M	KAL36250-26M	175
FLEX58D46M2	50	KAL36250-30M	KAL36250-30M	200

^[1] Input power fuses are Class J or Class T fast-acting. Class CC fuses may be used if the recommended fuse rating is 30 A or lower.



ALTIVAR® FLEX58 Chassis Drive Controller Circuit Breakers and Fuses

Circuit Breaker or Fuse Selections for 460 V Constant Torque Chassis Drive Controllers

Chassis Drive Controllers	hp	Circuit Breaker	F1-F2-F3 Fuses ^[1]
FLEX58KU18N4	1	GJL36007M02	5
FLEX58KU29N4	2	GJL36007M02	10
FLEX58KU41N4	3	GJL36015M03	12
FLEX58KU72N4	5	GJL36030M04	20
FLEX58KU90N4	7.5	GJL36030M04	25
FLEX58KD12N4	10	GJL36030M04	40
FLEX58KD16N4	15	GJL36050M05	50
FLEX58KD23N4	20	GJL36050M05	70
FLEX58KD28N4	25	GJL36075M06	70
FLEX58KD33N4	30	GJL36075M06	80
FLEX58KD46N4	40	FAL36100-18M	100
FLEX58KD54N4	50	FAL36100-18M	125
FLEX58KD64N4	60	KAL36250-25M	150
FLEX58KD79N4	75	KAL36250-26M	175

^[1] Input power fuses are Class J or Class T fast-acting. Class CC fuses may be used if the recommended fuse rating is 30 A or lower.

Circuit Breaker or Fuse Selections for 460 V Variable Torque Chassis Drive Controllers

Chassis Drive Controllers	hp	Circuit Breaker	F1-F2-F3 Fuses ^[1]
FLEX58KU18N4	1	GJL36007M02	5
FLEX58KU29N4	2	GJL36007M02	10
FLEX58KU41N4	3	GJL36015M03	12
FLEX58KU54N4	5	GJL36015M03	20
FLEX58KU72N4	7.5	GJL36030M04	25
FLEX58KU90N4	10	GJL36030M04	40
FLEX58KD12N4	15	GJL36050M05	50
FLEX58KD16N4	20	GJL36050M05	70
FLEX58KD23N4	25	GJL36075M06	70
FLEX58KD28N4	30	GJL36075M06	90
FLEX58KD33N4	40	GJL36075M06	110
FLEX58KD46N4	50	FAL36100-18M	150
FLEX58KD54N4	60	FAL36100-18M	175
FLEX58KD64N4	75	KAL36250-25M	200
FLEX58KD79N4	100	KAL36250-29M	200

^[1] Input power fuses are Class J or Class T fast-acting. Class CC fuses may be used if the recommended fuse rating is 30 A or lower.



ACCESSORIES

The following ALTIVAR accessories are not compatible with the FLEX58 Chassis Drive Controller:

- Fan Kits VW3A58821, VW3A58822, VW3A58823, VW3A58824, VW3A58825, and VW3A58826
- EMC Kits VW3A58831, VW3A58832, VW3A58833, and VW3A58834
- Conduit Box Kit VW3A58842, VW3A58843, VW3A58844, VW3A58845, VW3A58846, and VW3A58847

Drive Controller Accessory Cross-Reference

The following table shows which FLEX58 chassis drive controller spare parts and accessories are comparable to the following ALTIVAR 58 open drive controller spare parts and accessories.

AC Drive Controller Accessory Cross-Reference

ATV58 Type H Open	FLEX58 Chassis	ATV58 Type H Open	FLEX58 Chassis
ATV58HU29M2	FLEX58U29M2	ATV58HU41N4	FLEX58KU41N4
ATV58HU41M2	FLEX58U41M2	ATV58HU54N4	FLEX58KU54N4
ATV58HU54M2	N/A	ATV58HU72N4	FLEX58KU72N4
ATV58HU72M2	FLEX58U72M2	ATV58HU90N4	FLEX58KU90N4
ATV58HU90M2	FLEX58U90M2	ATV58HD12N4	FLEX58KD12N4
ATV58HD12M2	FLEX58D12M2	ATV58HD16N4	FLEX58KD16N4
ATV58HD16M2	FLEX58D16M2	ATV58HD23N4	FLEX58KD23N4
ATV58HD23M2	FLEX58D23M2	ATV58HD28N4	FLEX58KD28N4
ATV58HD28M2	FLEX58D28M2	ATV58HD33N4	FLEX58KD33N4
ATV58HD33M2	FLEX58D33M2	ATV58HD46N4	FLEX58KD46N4
ATV58HD46M2	FLEX58D46M2	ATV58HD54N4	FLEX58KD54N4
ATV58HU18N4	FLEX58KU18N4	ATV58HD64N4	FLEX58KD64N4
ATV58HU29N4	FLEX58KU29N4	ATV58HD79N4	FLEX58KD79N4

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