

Fuse & Wire Size Recommendation

ELGi

Always Better.

	Fixed Speed				Variable Speed		Always Better.			
Motor Voltage	230V	460V	230V	460V	460V	460V				
Model	Fuse size Time delay Dual element		Inverse time breaker sizing		Fuse size High-speed (Rapid - React)	Inverse time breaker sizing	Wire Size (Copper) [230v]	Wire Size (Copper) [460v]	Earth Ground Size [Copper]	
TS05	30[3PH] 40[1PH]	20.0	60[1PH] 30[3PH]	20.0	NA	NA	12 AWG	14 AWG	14 AWG	
TS10	40.0	25.0	70	35.0			8 AWG	12 AWG	12 AWG	
TS15	65.0	35.0	90	45.0			6 AWG	10 AWG	10 AWG	
EN02	15.0	NA	35	NA			14 AWG	NA	16 AWG	
EN03	20.0		40				12 AWG		14 AWG	
EN04	35[3PH] 50[1PH]	20.0	65[1PH] 35[3PH]	20.0			10[1PH] 12[3PH]	14 AWG	12 AWG	
EN05	35[3PH] 50[1PH]	20.0	65[1PH] 35[3PH]	20.0			8[1PH] 10[3PH]	14 AWG	12 AWG	
EN07	40.0	25.0	70	35.0			30	8 AWG	12 AWG	12 AWG
EN11 - EG11	65.0	35.0	90	45.0			40	6 AWG	10 AWG	10 AWG
EN15 - EG15	85.0	45.0	125	60.0			50	4 AWG	8 AWG	10 AWG
EN18 - EG18	100.0	50.0	150	80.0	60	2 AWG	8 AWG	8 AWG		
EN22 - EG22	125.0	65.0	175	90.0	80	1 AWG	6 AWG	8 AWG		
EN30 - EG30 - AB30	175.0	80.0	250	125.0	100	0 (1/0)	4 AWG	8 AWG		
EN37 - EG37 - AB37	225.0	110.0	300	150.0	125	00 (2/0)	2 AWG	6 AWG		
EG45 - AB45	NA	125.0	NA	175.0	150	NA	1 AWG	6 AWG		
EG55 - AB55 - OF45		150.0		225.0	200		1 AWG	6 AWG		
EG75 - AB75 - OF55/75		225.0		300.0	250		00 (2/0)	6 AWG		
EG90 - AB90 - OF90/110		250.0		350.0	aR-315		00 (2/0)	6 AWG		
EG110 - AB110 - OF135		300.0		450.0	aR-350		0000 (4/0)	1" x 1/8" Flat bar		
EG160 - OF145/170		400.0		600.0	aR-400		350 kcmil	1 - 3/8" x 1/8" flat bar		
EG200		500.0		800.0	aR-630		2 x 400 kcmil	1 - 3/8" x 1/8" flat bar		
EG250 - OF250		600.0		875.0	aR-800		2 x 400 kcmil	1 - 3/8" x 1/8" flat bar		
OF275/300		700.0		900.0	aR-900		2 x 450 kcmil	2" x 1/4" flat bar		

Note:

- Fuse and Breaker ratings are sized as per NFPA 70, article 430, Clause 430.62(A), Table 430.52 with the following exceptions applicable to fixed-speed, wye-delta starter units only:
 - Where the values for short circuit protection devices determined by the above table (derived from Table 430.52 of article 430) do not correspond to the standard size or rating of a fuse or breaker, a higher size/rating that does not exceed the next higher standard ampere rating shall be permitted.
 - Where the rating specified in the above table or the rating modified by exception A, is not sufficient for the starting current of the motor:
 - The rating of a time delay (dual element) fuse shall be permitted to be increased but shall in no case exceed 225 % of the full load current.
 - The rating of an inverse time circuit breaker shall be permitted to be increased but shall not exceed 400% of the full load current for models pulling less than 100 amperes or 300% for models pulling greater than 100 amperes.
- For VFD units with power rating 90kW and above type of fuse recommended is Class aR fuse (semiconductor fuse) for all others, using Class RK1,J,T,CC or Semiconductor Fuse is recommended.

//The above chart lists recommendations. In no case does the information listed above (here) in this document supercede that of your local area electrical codes/requirements