Circuit Breakers and Cable thicknesses

It is of high importance that the Circuit Breaker and the cables you are using have the correct current rating for your application.

For your convenience DamenCNC recommends the following Circuit Breaker ratings and minimum cable thicknesses for use with TeknoMotor tools:

$egin{array}{c} \mathbf{VFD} \\ \mathbf{Series} \end{array}$	$egin{array}{c} \mathbf{Power} \ [\mathbf{kW}] \end{array}$	Phases and Voltage	Cable thickness Breaker - VFD	Cable thickness VFD - Teknomotor	Breaker and type
VFD~004	0.4	1 - 230VAC	$0.75 \mathrm{mm}^2$	$0.75~\mathrm{mm}^2$	2A - type C
VFD 007	0.7	1 - 230VAC	$0.75 \mathrm{mm}^2$	$0.75 \mathrm{mm}^2$	4A - type C
VFD~015	1.5	1 - 230VAC	$0.75 \mathrm{mm}^2$	$0.75~\mathrm{mm}^2$	6A - type C
VFD 022	2.2	1 - 230VAC	$0.75 \mathrm{mm}^2$	$0.75 \mathrm{mm}^2$	10A - type C
VFD~007	0.7	3 - 400VAC	$0.75 \mathrm{mm}^2$	$0.75 \mathrm{mm}^2$	2A - type C
VFD~015	1.5	3 - 400VAC	$0.75 \mathrm{mm}^2$	$0.75~\mathrm{mm}^2$	4A - type C
VFD 022	2.2	3 - 400VAC	$0.75 \mathrm{mm}^2$	$0.75~\mathrm{mm}^2$	5A - type C
VFD 037	3.7	3 - 400VAC	$1.5 \mathrm{mm}^2$	$1.5~\mathrm{mm^2}$	10A - type C
$VFD\ 055$	5.5	3 - 400VAC	$1.5 \mathrm{mm}^2$	$1.5~\mathrm{mm^2}$	13A - type C
VFD~075	7.5	3 - 400VAC	$2.5~\mathrm{mm}^2$	$2.5~\mathrm{mm^2}$	16A - type C
VFD 110	11.0	3 - 400VAC	$4~\mathrm{mm^2}$	$4~\mathrm{mm^2}$	25A - type C
VFD 150	15.0	3 - 400VAC	$6~\mathrm{mm^2}$	$6~\mathrm{mm^2}$	35A - type C
VFD 185	18.5	3 - 400VAC	$10~\mathrm{mm}^2$	$10~\mathrm{mm}^2$	40A - type C
VFD 220	22.0	3 - 400VAC	$10~\mathrm{mm^2}$	$10~\mathrm{mm^2}$	50A - type C

The assumptions that are made within this table are:

- 1. Your High Speed Motor such as a TeknoMotors can whitstand a 25 % overload. Beware that a VFD could provide a 300% overload, but high speed milling motors will not survive such inputs.
- 2. This information is intended for TeknoMotor use. If you want to use a different application, these values could potentially be wrong!
- 3. Your power cables are shorter than 25 meters. If you wish to use a longer power cable, select a thicker cable thickness to compensate.

Danger:



This information serves as a recommendation only. DamenCNC can not be held not responsible for your installation specifications and potential damage.