



= QUICK START = Power Electronics digitale softstarters serie V5

Met + en – kan door de menu's gestapt worden.

Met * kan een menu geopend worden, waarna met + en – weer door de parameters gestapt kan worden.

Let op: parameter wijzigen kan met + en – toets, echter SAMEN met de toets *

- 1) Stuurspanning 230 VAC - 50 Hz aansluiten op klem L en N en inschakelen
- 2) Volgende instellingen maken/ controleren
 - G6.1 - mode 2 (bediening d.m.v. klemmen)
 - G6.3 - mode 4 (start/ stop via klem 10 en 11)
 - Al standaard ingesteld zijn de digitale uitgangen: G7.3 – mode 9 (relais , klem 7-8-9, komt op bij fout en G7.2-mode 15; relais 2, klem 4-5-6, komt op als ramp up is beëindigd)
- 3) Motorgegevens instellen
 - G2.1 - nominale stroom softstarter (controleer typeplaatje!) bijv. 110 A
 - G2.2 - stroom motor typeplaatje instellen bijv. 64 A
 - G2.3 - spanning motor typeplaatje instellen bijv. 400 V
 - G2.4 - vermogen motor typeplaatje instellen bijv. 37 kW
 - G2.5 - cos phi vermogen typeplaatje instellen bijv.0,9
- 4) Hoofdspanning 3 x 400 VAC - 50 Hz inschakelen
- 5) Spanning controleren
- 6) Acceleratietijd: (ingesteld op 12 sec.)
 - Lage massatraagheid = acc. tijd verkorten (G4.5) en stroomgrens optimaliseren (G4.6).
 - Grote massatraagheid: acc. tijd verlengen (G4.5) en stroomgrens optimaliseren (G4.6).

Aansluitingen:

Klem 10	= common t.b.v. digitale ingangen
Klem 11	= progr. Ing. 1 start (maakkontakt) als G6.3 = 4
Klem 12	= progr. Ing. 2
Klem 13	= progr. Ing. 3
Klem 14	= progr. Ing. 4
Klem 15	= progr. Ing. 5
Klem 16-17	=PTC input
Klem 1-2-3	= relais 1 (1=common, 2=verbreker, 3=maker)
Klem 4-5-6	= relais 2 (komt op bij einde ramp-up) 4=common, 5=verbreker, 6=maker)
Klem 7-8-9	= relais 3 (komt op bij fault als G7.3 = 9) 7=common, 8=verbreker, 9=maker

Ingangen kunnen worden aangepast in groep G6

Uitgangen kunnen worden aangepast in groep G7

Controle ingangen in G0: Dig input=X0000K (x=on, 0=off, K PTC not active,F Ptc is active)

Led 1, orange, voltage present on control board, Led 2 green blinking, motor is acc/dec

Led 2, green on, motor running, Led 3 Red on, fault

Voor meer informatie kunt u zich wenden tot onze application engineers.

7.1 CONTROL TERMINALS.

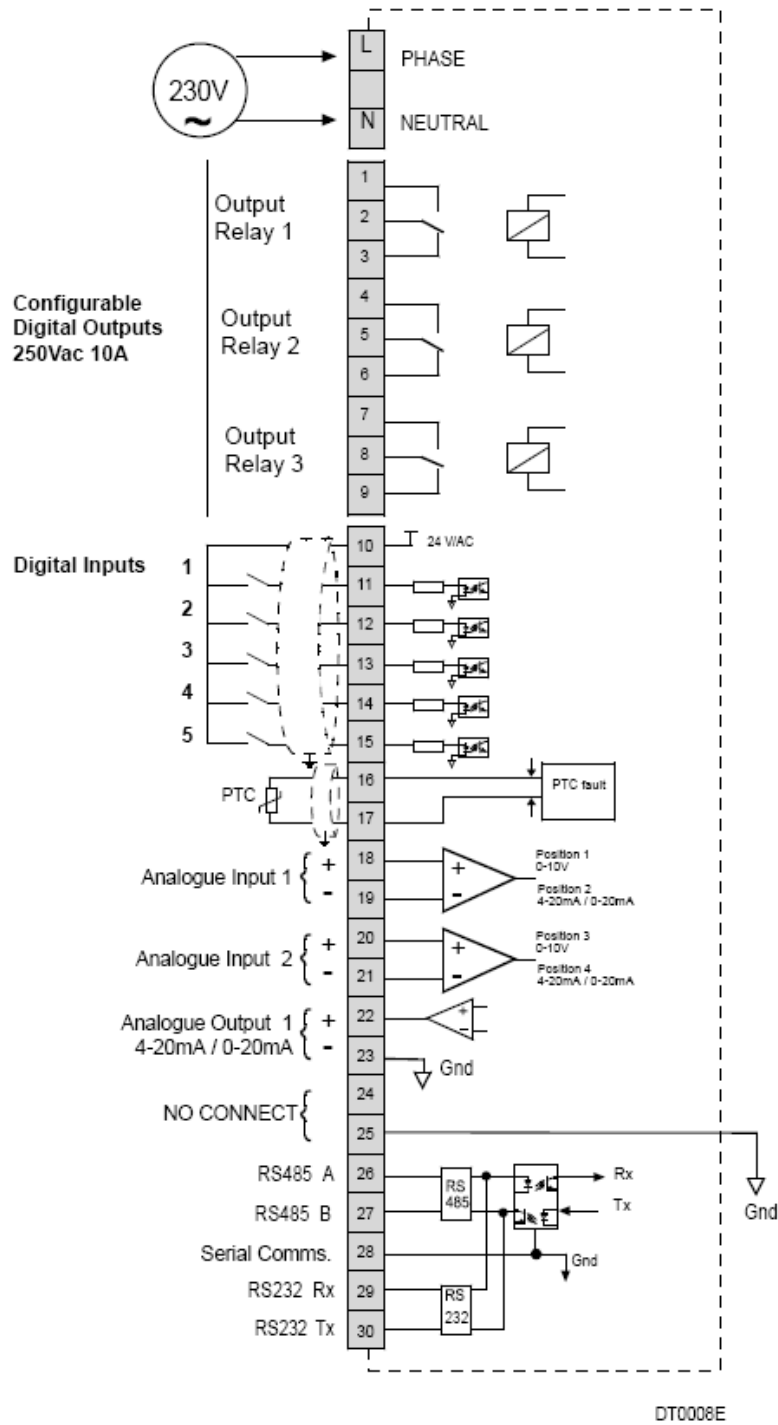


Figure 12. Control Terminals.

G6.3 DIGITAL INPUT 1

Screen 3 D INPUT1 SEL=4
Description Multifunction 1 input.
Range 0 to 10
Default Value 0 Not Used.
Function Select the task of the digital input once it is active (X).
Adjust See the table below.

Nr.	MODE	STATUS	FUNCTION
0	Not active	NA	Input has no effect.
1	Start	NO	Commands start.
2	Stop	NC	Commands stop.
3	Stop-Reset	NC	Commands stop; Reset on opening edge.
4	Start-Stop	NO	Commands start when closed; Stop when open.
5	Reset	NC	Reset on opening edge.
6	Slow Speed +	NA	Slow Speed +.
7	Slow Speed -	NA	Slow Speed -.
8	DC Brake	NA	Active DC Brake.
9	Dual setting	NA	Active Dual setting.
10	External trip	NC	Error occurs once this contact is opened.

RELAY TABLE SELECTION		
MODE	FUNCTION	DESCRIPTION
0	Not active	Relay is disable, not used.
1	Active	Relay is enabled.
2	Warning overload	The motor current exceeds the value adjusted in parameter G3.2 (OVERLOAD CURRENT).
3	Warning under load	The motor current is below the value adjusted in parameter G3.6 (UNDERLOAD CURRENT).
4	Warning over voltage	The mains voltage is equal or higher than G3.12 (OVERVOLTAGE).
5	Warning low voltage	The mains voltage is less or equal than G3.10 (UNDERVOLTAGE).
6	Comparator 1	Relay enables when the value of the parameter set in screen G9.1 is above screen G9.2 value after time set in screen G9.4. Relay disables when the value of the parameter set in screen G9.1 is below screen G9.3 value after time set in screen G9.5.
7	Comparator 2	Relay enables when the value of the parameter set in screen G9.6 is above screen G9.7 value after time set in screen G9.9. Relay disables when the value of the parameter set in screen G9.6 is below screen G9.8 value after time set in screen G9.10.
8	Comparator 3	Relay enables when the value of the parameter set in screen G9.11 is above screen G9.12 value after time set in screen G9.14. Relay disables when the value of the parameter set in screen G9.11 is below screen G9.13 value after time set in screen G9.15.
9	General Fault	Relay will be active a fault occurs.
10	No fault	Will be active if no faults are present (failsafe).
11	Thyristor fault	One or more thyristors are fault.
12	Autoreset Fault	Relay enables when screen G15.2 Attemp numbr setting is passed over.
13	Ready	The soft starter is ready to run the motor.
14	Run	ON at the beginning of the ramp up / OFF at the end of the ramp down.
15	Bypass/React	ON at the end of the ramp up / OFF at the beginning of the ramp down.
16	Delay	ON at the end of the ramp up / OFF at the end of the ramp down.
17	High pressure	The V5 is running and the pressure switch opens for longer than the time entered in screen G16.4
18	Low pressure	The V5 is running and the pressure switch opens for longer than the time entered in screen G16.5.
19	No flow	The flow switch is ignored for the time set in screen G16.6 on receipt of a valid start signal. After this time the V5 will trip if no flow is indicated for longer than the time set in screen G16.7.
20	Low water	The well probe controller (or other level controller) detects a lack of water.
21	Pump fault	A fault from F24 to F27 and F5 has occurred. Pump related faults.

Table 9. Relay selection.