Danfoss VLT 2800 (FC protocol)

HMI Factory Setting:

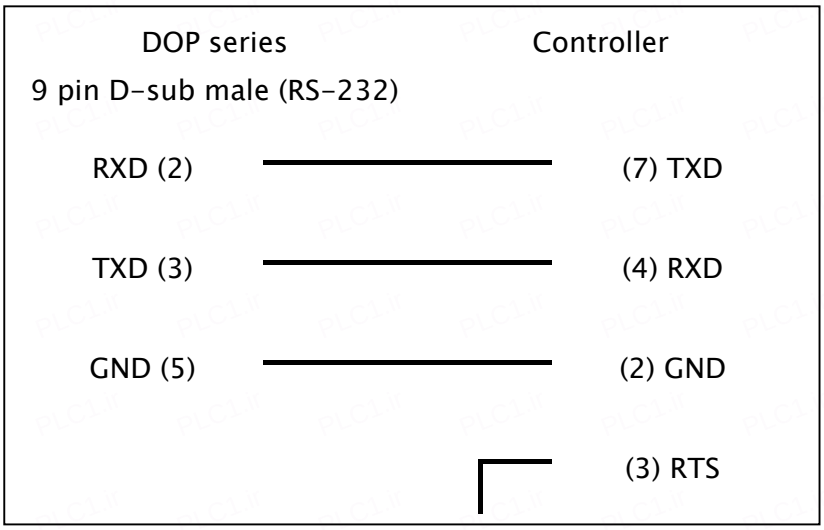
Baud rate: 9600. 8. EVEN. 1(RS-485)

Controller Station Number: 1

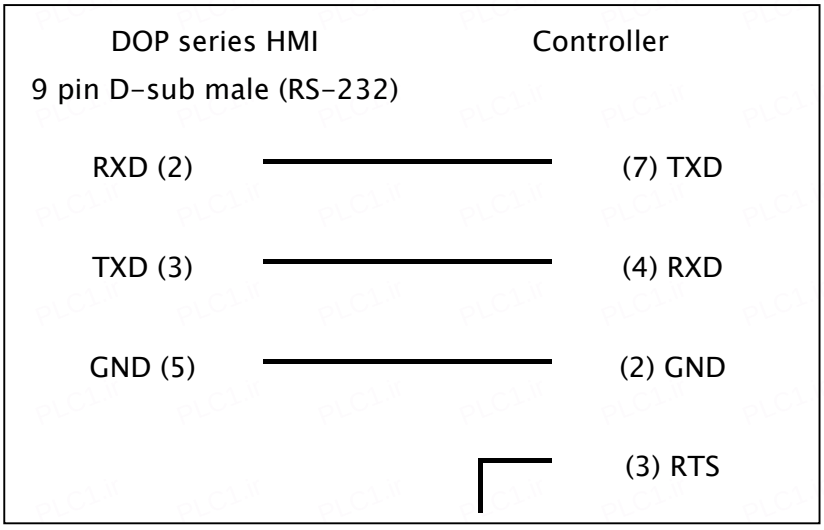
Control Area / Status Area: None/None

Connection

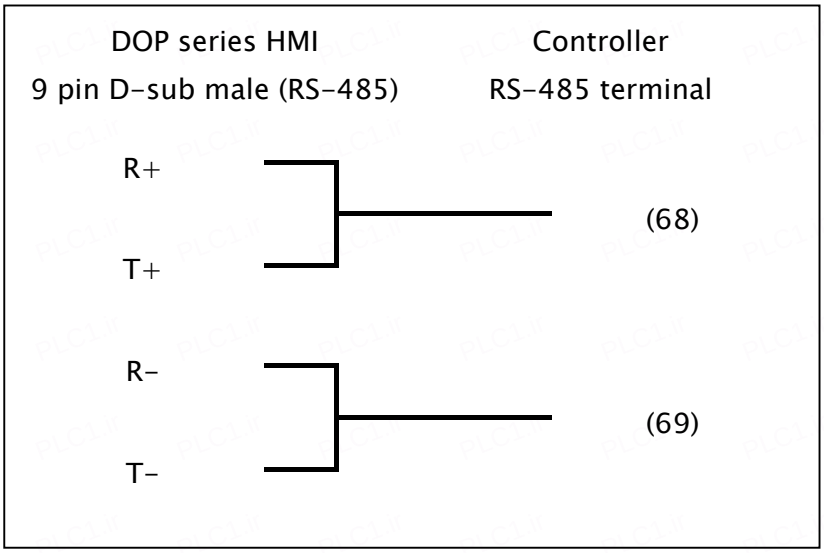
a. RS-232 (DOP-A/AE/AS, DOP-B Series)



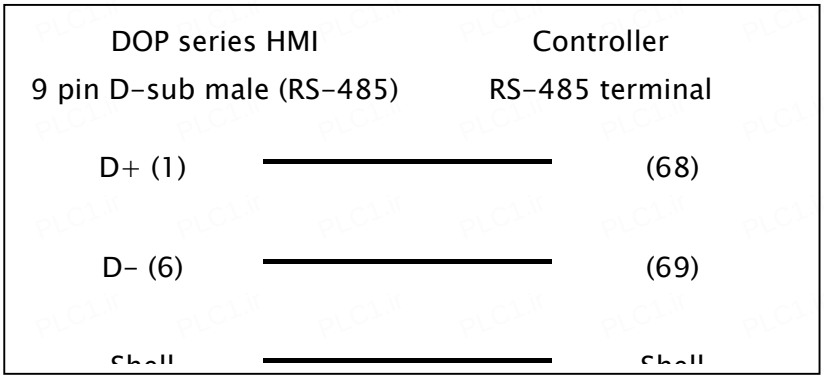
b. RS-485 (DOP-AS57 Series)



c. RS-485 (DOP-AS35/AS38 Series)



d. RS-485 (DOP-B Series)



Definition of PLC Read/Write Address

a. Registers

Type	Format Word No.(n) Index No.(i)	Read/Write Range	Data Length	Note
Parameter	Pn:i	P0:0 - P3499:31	Double Word	6, 7, 8
Control Word	CTRWDn	CTRWD0	Word	9, 11
Status Word	STAWDn	STAWD0	Word	10, 12

b. Contacts

Type	Format Word No.(n) Index No.(i) Bits No.(b)	Read/Write Range	Note

Type	Format Word No.(n) Index No.(i) Bits No.(b)	Read/Write Range	Note
Parameter	Pn:i.b	P0:0.0 – P3499:31.31	

NOTE

1) Delta HMI can be connected to VLT-2800, 5000, 6000, 7000 controller.
2) Each data length format of Danfoss AC drive parameter is not fixed, therefore, "Multiple Duplicate" function is not provided.
3) Maximum supported alarm number is 16. An alarm number over 16 will result and error.
4) Does not support "optimum read/write" characteristic.
5) If the selected element is a string, the minimum data length should be greater than 2.
6) The default setting for no index No. is 0.
7) The default setting of index No. P606 ~ P617 is 1.
8) Please notice that it is necessary to enter index No. on certain parameters of Danfoss controllers. Please pay close attention to the setting range of index number. For example, the index No. setting range of the parameter does not starts with 0, if P615 is from 1 to 20, an index value (ex:P615:1) must be entered otherwise read & write failure would occur. For range detail, please see Danfoss manual.
9) CTRWD: Write-only. (Can not be used on the read devices that display the value and input value…etc. It is recommended to be used on the setting value/setting constant (button), or macro function.)
10) STAWD：Read-Only.
11) Control Word

Bit	Bit = 0	Bit = 1
15	No Function	Reversing
14	Choice of Setup 2 (msb)	
13	Choice of Setup 1 (lsb)	
12	No Function	Relay 04 activated
11	No Function	Relay 01 activated
10	Data Not Vaild	Vaild
9	Ramp 1	Ramp2
8	Jog 1 OFF	ON

7	No Function	Reset
6	Ramp Stop	Start
5	Hold	Ramp Enable
4	Quick-Stop	Ramp
3	Coasting	Enable
2	DC Brake	Ramp
1	Preset reference choice msb	
0	Preset reference choice msb	

Control Word is useable only if Bit 10 =1 (Data Valid).

12) Status Word

Bit	Bit = 0	Bit = 1
15	Timer OK	Above limit
14	Torque OK	Above limit
13	Voltage OK	Above limit
12	Temperature OK	Over-Temp, auto-start pending
11	Not Running	Running
10	Out of Range	Frequency OK
9	Local Control	Bus Control
8	Speed reference	Speed reference
7	No Warning	Warning
6	Reserved	
5	Reserved	
4	Reserved	
3	No Fault	Trip
2	Coasting	Enabled
1	VLT not ready	Ready
0	Control not ready	Ready