

~fluiDroid® | NEO

Evolving Excellence : Redefining Reliability



VFD Interfacing Quick Reference Handbook Ver 1.1

VFD Drives

1. Danfoss VLT 2800
2. Danfoss FC 51 Micro Drive
3. Danfoss VLT HVAC FC102
4. Schneider Electric Altivar 303
5. Schneider Electric Altivar 310
6. Schneider Electric Altivar 212
7. ABB ACS550
8. Siemens V20

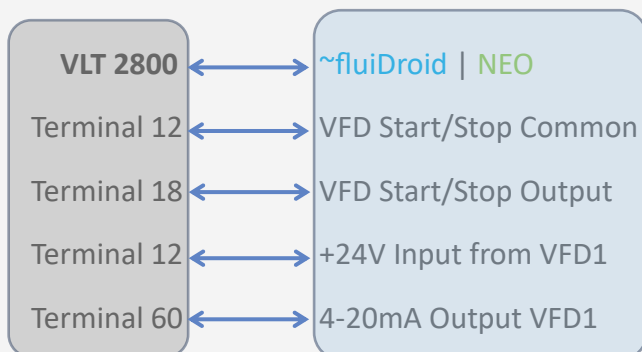
AMSAT Technologies Pvt. Ltd will add more makes and models of VFDs in future to this Quick Reference Handbook.

If you need instructions for interfacing any VFD Make/Model to ~fluidroid | NEO please let us know. We will be more than happy to help and also expand the knowledge base for everyone.

Our only request is, please provide the Make and the exact model number and photo of the drive. Also please provide us with 3 working days to provide the interfacing instructions for the same.

Danfoss VLT2800

Connections:

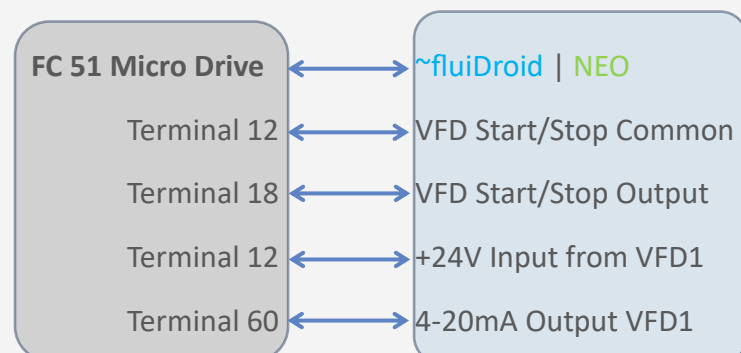


Parameters:

Parameter 204 = 30 (Minimum Frequency)
 Parameter 205 = 50 (Max. Frequency)
 Parameter 302 = 7
 Parameter 308 = 0
 Parameter 314 = 1
 Parameter 315 = 4.0
 Parameter 316 = 20.0
 Parameter 323 = 8

Danfoss FC 51 Micro Drive

Connections:

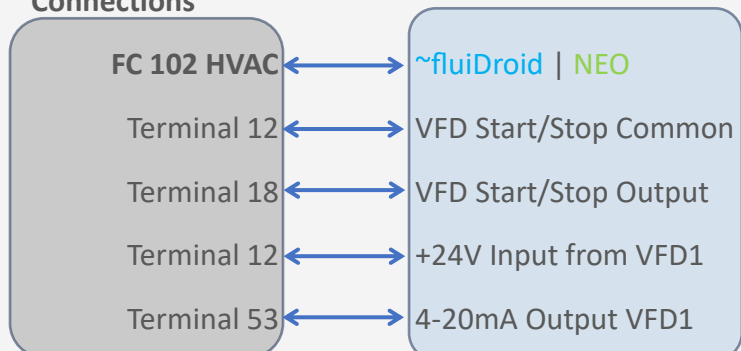


Parameters:

3-00 = 0	5-10 = 8
3-02 = 0	5-12 = 0
3-03 = 50	6-22 = 4.00
3-14 = 0	6-23 = 20.00
3-15 = 2	6-24 = Min Frequency
3-16 = 0	6-25 = Max. Frequency
3-17 = 0	7-20 = 0
3-18 = 0	

Danfoss VLT HVAC FC 102

Connections



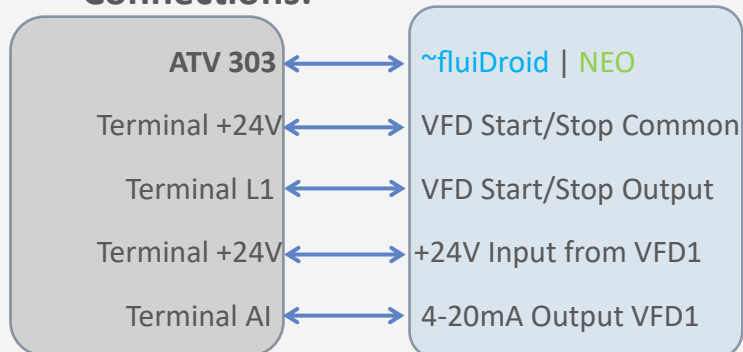
Parameters:

3-00 = 0	5-10 = 8
3-02 = 0	5-12 = 0
3-03 = 50	6-12 = 4.00
3-14 = 0	6-13 = 20.00
3-15 = 1	6-14 = Min Frequency
3-16 = 0	6-15 = Max. Frequency
3-17 = 0	1-00 = 0
3-18 = 0	

!!! IMPORTANT: Set Switch S201 on VFD to ON Position

Schneider Electric Altivar ATV 303

Connections:



Parameters:

First perform a Factory Reset of the Drive using the following procedure:

102 – Set to **64** (To change the assignment of this parameter, press the ENT key for 2 s)

Then Program/Check the following parameters and then Restart Power to Drive:

203 – Set the parameter to **00** for Source operation

512.0 – Low Speed to **30**

512.2 – High Speed to **50**

201 – Type of Control – Two Wire Control – Set to **00** (To change the assignment of this parameter, press the ENT key for 2 s)

204.0 – AI1 Type – Current : x-y mA – Set to **OA**

204.1 – AI1 current scaling parameter of 0% - Set to **4mA**

204.2 – AI1 current scaling parameter of 100% - Set to **20mA**

217 – Reference Template – Standard – Set to **00**

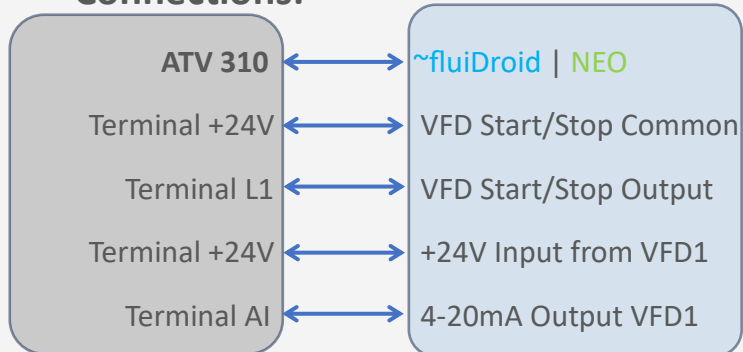
401 – Reference Channel 1 – Set to **01**

406 – Channel Configuration – Set to **02**

407 – Command Channel 1 – Set to **01**

Schneider Electric Altivar ATV 310

Connections:



Parameters:

First perform a Factory Reset of the Drive using the following procedure:

102 – Set to **64** (To change the assignment of this parameter, press the ENT key for 2 s)

Then Program/Check the following parameters and then Restart Power to Drive:

203 – Set the parameter to **00** for Source operation

512.0 – Low Speed to **30**

512.2 – High Speed to **50**

201 – Type of Control – Two Wire Control – Set to **00** (To change the assignment of this parameter, press the ENT key for 2 s)

204.0 – AI1 Type – Current : x-y mA – Set to **0A**

204.1 – AI1 current scaling parameter of 0% - Set to **4mA**

204.2 – AI1 current scaling parameter of 100% - Set to **20mA**

217 – Reference Template – Standard – Set to **bSd**

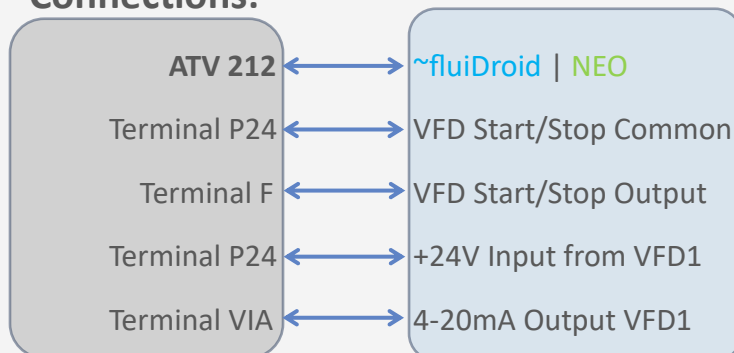
401 – Reference Channel 1 – Set to **01**

406 – Channel Configuration – Set to **02**

407 – Command Channel 1 – Set to **01**

Schneider Electric Altivar ATV 212

Connections:



!!! IMPORTANT:

Set Switch SW100 to I
Set Switch SW102 to Source

Parameters:

First perform a Factory Reset of the Drive using the following procedure:

typ – Set to 3

Then Program/Check the following parameters and then Restart Power to Drive:

LL – Low Limit Frequency – Set to 30 Hz

UL – Upper Limit Frequency – Set to 50 Hz

CNoD – Command Mode Set – Set to 0

FnOD – Frequency Mode Set – Set to 1

FH – Max Frequency – Set to 50 Hz

F111 – Logic Input F Selection – Set to 2

F109 – VIA Selection – Set to 0

F201 – VIA ref Point 1 – Set to 20 %

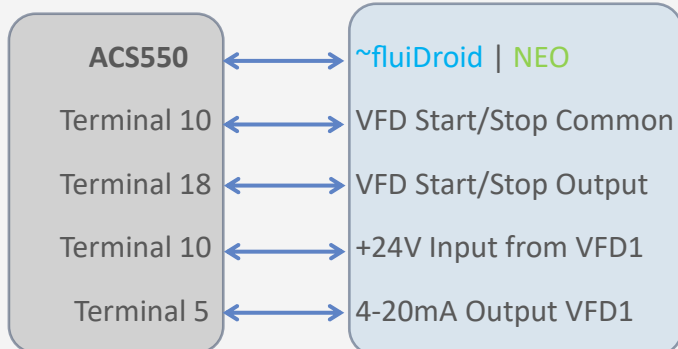
F202 – Min. Frequency

F203 – VIA ref Point 2 – Set to 100%

F204 – Max. Frequency

ABB ACS 550

Connections:



!!! IMPORTANT

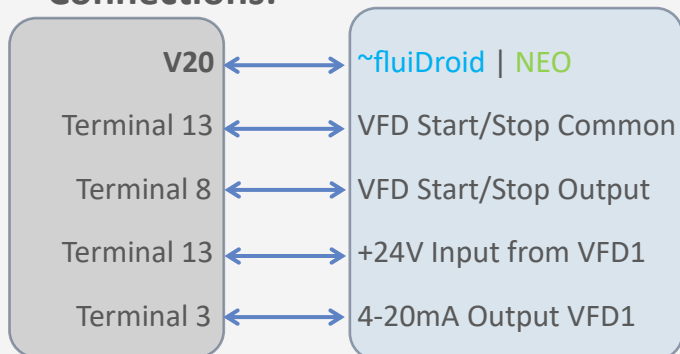
Loop Terminal 6 and Terminal 11 on VFD
Loop Terminal 10 to terminal 15 on VFD
Loop Terminal 10 to terminal 16 on VFD

Parameters:

9902 = 5
2007 = Minimum Frequency
(Recommended +30 Hz)
2008 = Maximum Frequency (+50 Hz)
1103 Ref 1 Select = 2 AI2 Select
1104 Ref1 MIN
1105 Ref1 MAX
1107 REF2 MIN 60% (Min. Frequency)
1108 REF2 MAX 100%
1304 MIN AI2 % 20
1305 MAX AI2 % 50
1602 PARAM LOCK 0=Locked 1= Open
1607 PARAM SAVE 1 = Save
2007 MIN Freq 38Hz
2008 MAX Freq 50Hz
9904 = 3 (Speed Control)
3401 = 0103 (To display Hz)

Siemens V20

Connections:



Parameters:

Settings have to be done in a specific order. Please follow the following order when doing the settings:

P0003 = 3
P0010 = 30
P0970 = 21

Restart power to drive

P0010 = 1
P0700 = 2
P0701 = 1
P0702 = 0
P0703 = 0
P0704 = 0
P0712 = 0
P0713 = 0
P0719 = 2
P0727 = 0
P0756 = 2
P0757 = 4
P0758 = 0
P0759 = 6
P0760 = 100
P0761 = 4
P1000 = 2
P1080 = Min. Freq
P1082 = Max. Freq
P1070 = 755