Product note
DCS800 Demo Unit

Power and productivity
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Commissioning instructions using DriveWindow or DriveWindow Light

General
The mains must be connect to phase L1 and L2. The displayed line voltage is 70% of the actual line voltage. The overspeed relay trips at 2400 rpm with fault message **F512 MainsLowVolt**.

Set default (factory) settings	
Before starting all parameters **must** be set to default (factory):	
Parameter	**Value**
ApplMacro (99.08)	**Factory** and then
ApplRestore (99.07)	**Yes**

Adapt the drive	
*M1MotNomVolt (99.02)**	60 V or 80 V depending on the used motor
*M1NomCur (99.03)**	4 A
M1BaseSpeed (99.04)	1500 rpm
*NomMainsVolt (99.10)**	230 V_{AC} or 115 V_{AC}
M1NomFldCur (99.11)	0.31 A
Ref1Sel (11.03)	**AI1**
IndexAO1 (15.01)	104
IndexAO2 (15.06)	117
USI Sel (16.09)	**Extended**
M1SpeedMin (20.01)	-1500 rpm
M1SpeedMax (20.02)	1500 rpm
*M1CurLimBrdg1 (20.12)**	50 %
*M1CurLimBrdg2 (20.13)**	-50 %
*ArmAlphaMax (20.14)**	165° el
*ArmAlphaMin (20.15)**	0° el
AccTime1 (22.01)	5 s
DecTime1 (22.02)	5 s
KpS (24.03)	1
TiS (24.09)	1000 ms
*ArmOvrVoltLev (30.08)**	160 %
*ArmOvrCurLev (30.09)**	120 %
M1OvrSpeed (30.16)	2000 rpm
DispParam1Sel (34.01)	104
CtrlModeSel (43.05)	**FeedFwdRef**
*RevDly (43.14)**	2 ms
*RevMode (43.16)**	**Hard**
*M1OperModeFex4 (45.22)**	**1-phase**
*ZeroCurTimeOut (97.19)**	30 ms
*HW FiltUDC (97.26)**	**FilterOn**

Autotunings
For all autotunings use ServiceMode (99.06)

* this setting is required for a single-phase demo unit.

Commissioning instructions using DriveWindow Light and Startup Assistant

General

The mains must be connect to phase L1 and L2.
The displayed line voltage is 70% of the actual line voltage.
The overspeed relay trips at 2400 rpm with fault message **F512 MainsLowVolt**.

Set default (factory) settings

Before starting all parameters **must** be set to default (factory):

Parameter	Value
ApplMacro (99.08)	**Factory** and then
ApplRestore (99.07)	**Yes**

Adapt the drive using DriveWindow Light

Ref1Sel (11.03)	**AI1**
USI Sel (16.09)	**Extended**
*ArmAlphaMax (20.14)**	165° el
*ArmAlphaMin (20.15)**	0° el
KpS (24.03)	1
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DispParam1Sel (34.01)	104
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*ZeroCurTimeOut (97.19)**	30 ms
*HW FiltUDC (97.26)**	**FilterOn**

Continue adapting the drive using the Startup Assistant

Start the Startup Assistant by pressing the *Wizard* button in DriveWindow Light.

Assistant menu

Press the *Start* button to run the basic assistants.

1. Name plate data

*M1MotNomVolt (99.02)**	60 V or 80 V depending on the used motor
*M1NomCur (99.03)**	4 A
M1BaseSpeed (99.04)	1500 rpm
*NomMainsVolt (99.10)**	230 V_{AC} or 115 V_{AC}
M1NomFldCur (99.11)	0.31 A
M1SpeedMin (20.01)	-1500 rpm
M1SpeedMax (20.02)	1500 rpm
*ArmOvrCurLev (30.09)**	120 %
M1OvrSpeed (30.16)	2000 rpm

2. Macro assistant

Press the *Advanced* and *Edit parameters* buttons to change the I/O settings.

AO settings

IndexAO1 (15.01)	104
IndexAO2 (15.06)	117

3. Autotuning field current controller

Press the *Start* button, the results of the tuning will be shown in *Changed parameters*.

4. Autotuning armature current controller

*M1CurLimBrdg1 (20.12)**	50 %
*M1CurLimBrdg2 (20.13)**	-50 %

Press the *Start* button, the results of the tuning will be shown in *Changed parameters*.

5. Speed feedback assistant

Press the *Start* button and follow the instructions.

6. Autotuning speed controller

AccTime1 (22.01)	5 s
DecTime1 (22.02)	5 s

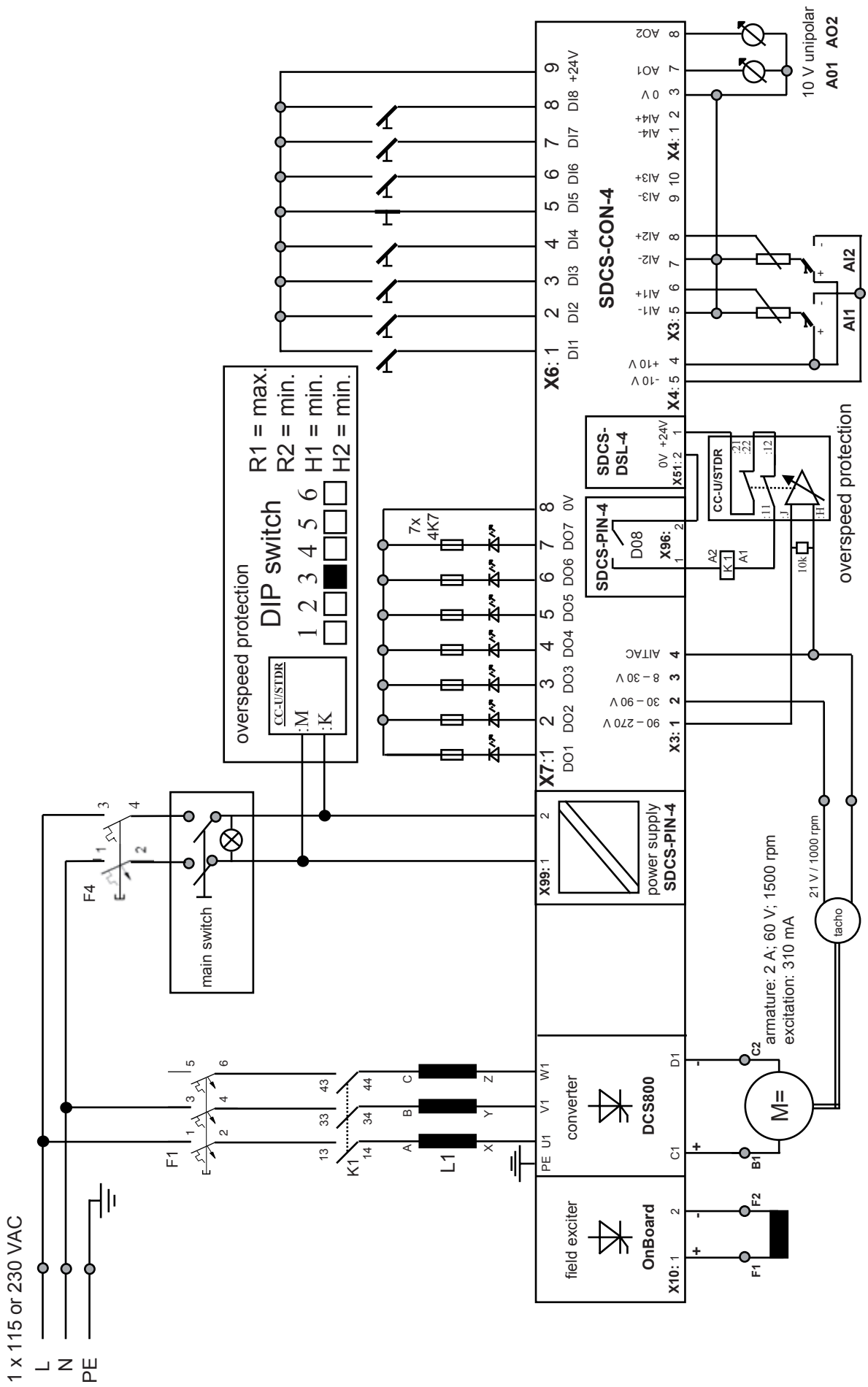
Use the slider to adjust the step response and press the *Start* button, the results of the tuning will be shown in *Changed parameters*.

7. Field weakening assistant

Press the *Start* button, the results of the tuning will be shown in *Changed parameters*.

* this setting is required for a single-phase demo unit.

DCS800 Demo Unit single-phase



DCS800 Demo Unit Dimensions and Weight

Dimensions		
H	W	D
680	360	350 mm
25.1	14.2	13.7 inch
Weight: 36 kg / 79.2 lbs		

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