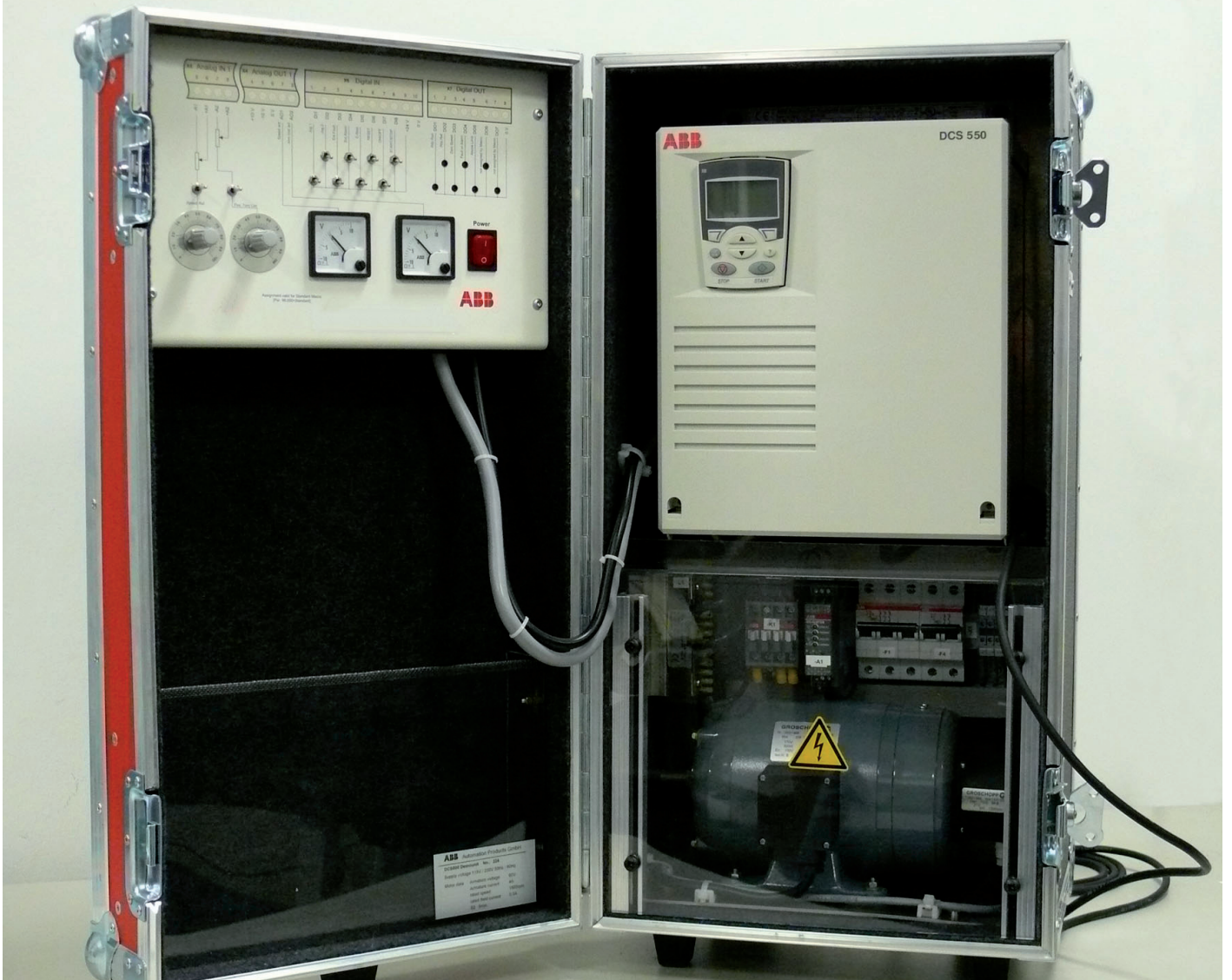


Product note
DCS550 Demo Unit



Commissioning instructions using DriveWindow Light

General

The mains must be connect to phase L1 and L2.

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
<i>ApplMacro</i> (99.08)	Factory and then
<i>ApplRestore</i> (99.07)	Yes

Adapt the drive

<i>M1MotNomVolt</i> (99.02)*	60 V or 80 V depending on the used motor
<i>M1NomCur</i> (99.03)*	4 A
<i>M1BaseSpeed</i> (99.04)	1500 rpm
<i>NomMainsVolt</i> (99.10)*	230 V _{AC} or 115 V _{AC}
<i>M1NomFldCur</i> (99.11)	0.31 A
<i>Ref1Sel</i> (11.03)	A11
<i>IndexAO1</i> (15.01)	104
<i>IndexAO2</i> (15.06)	117
<i>M1SpeedMin</i> (20.01)	-1500 rpm
<i>M1SpeedMax</i> (20.02)	1500 rpm
<i>M1CurLimBrdg1</i> (20.12)*	50 %
<i>M1CurLimBrdg2</i> (20.13)*	-50 %
<i>ArmAlphaMax</i> (20.14)*	165° el
<i>ArmAlphaMin</i> (20.15)*	0° el
<i>AccTime1</i> (22.01)	5 s
<i>DecTime1</i> (22.02)	5 s
<i>KpS</i> (24.03)	1
<i>TiS</i> (24.09)	1000 ms
<i>ArmOvrVoltLev</i> (30.08)*	160 %
<i>ArmOvrCurLev</i> (30.09)*	120 %
<i>M1OvrSpeed</i> (30.16)	2000 rpm
<i>DispParam1Sel</i> (34.01)	104
<i>ZeroCurTimeOut</i> (97.19)*	30 ms

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 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
<i>ApplMacro</i> (99.08)	Factory and then
<i>ApplRestore</i> (99.07)	Yes

Adapt the drive using DriveWindow Light

<i>Ref1Sel</i> (11.03)	AI1
<i>ArmAlphaMax</i> (20.14)*	165° el
<i>ArmAlphaMin</i> (20.15)*	0° el
<i>KpS</i> (24.03)	1
<i>TIS</i> (24.09)	1000 ms
<i>ArmOvrVoltLev</i> (30.08)*	160 %
<i>DispParam1Sel</i> (34.01)	104
<i>ZeroCurTimeOut</i> (97.19)*	30 ms

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

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

2. Macro assistant

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

AO settings

<i>IndexAO1</i> (15.01)	104
<i>IndexAO2</i> (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

<i>M1CurLimBrdg1</i> (20.12)*	50 %
<i>M1CurLimBrdg2</i> (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

<i>AccTime1</i> (22.01)	5 s
<i>DecTime1</i> (22.02)	5 s

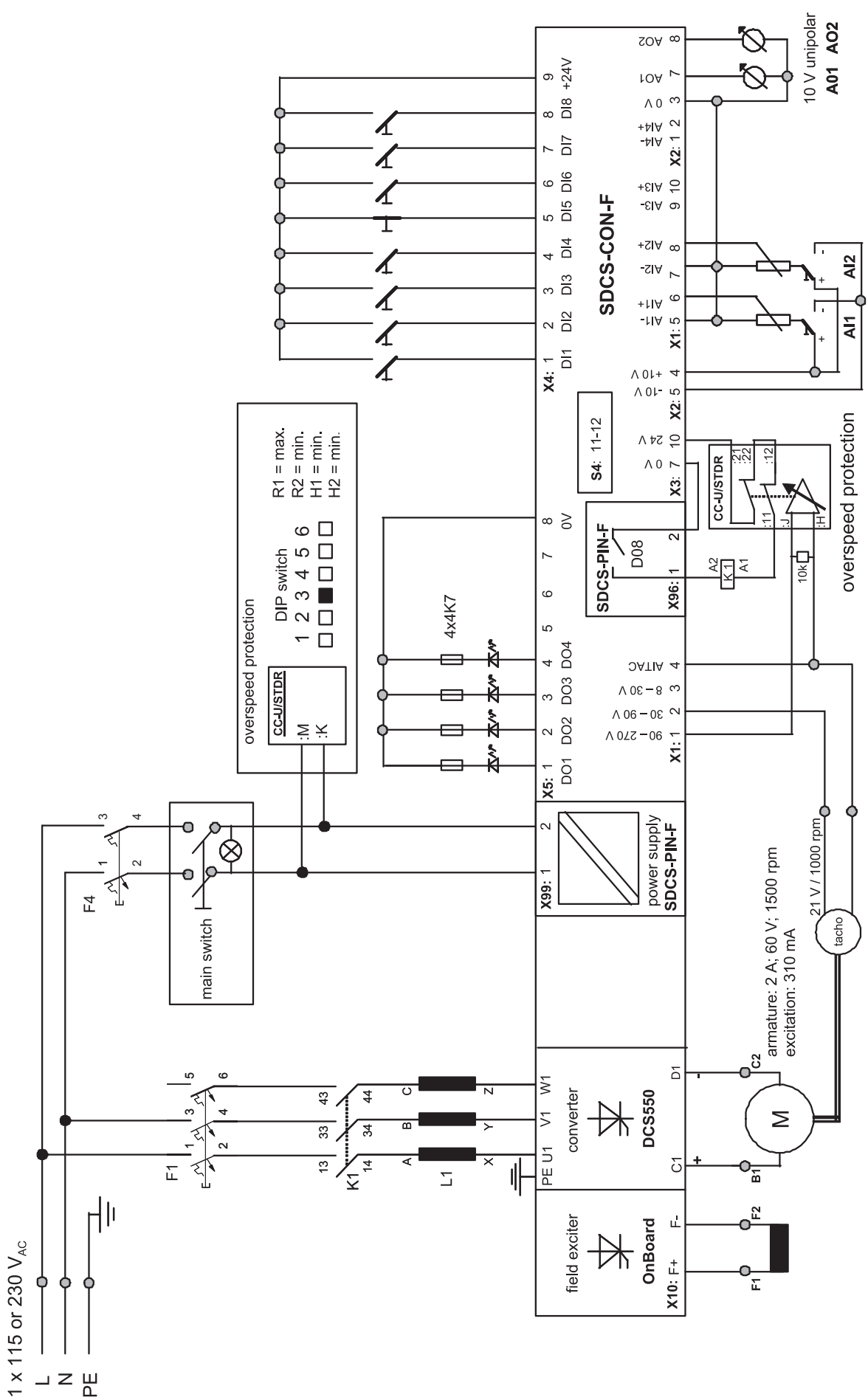
Use the slider to adjust the step response and press the *Start* button, the results of the tuning will be shown in *Changed parameters*.

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.

DCS550 Demo Unit single-phase



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DCS550 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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