ABB ACS 600 Parameter Settings

The parameters in the ACS 600 frequency converter must be adapted to Stalectronic 700 and the ABB high-speed motor. The parameters should be set to the following settings.

Start parameter D "Supply Voltage" should be set to the supply voltage connected to the frequency converter.

How to set the parameters is described in the ACS 600 User's Manual, which is delivered together with the frequency converter.

Parameter	Factory	Stal Setting	Custom Setting
Actual signals	(Three default signals in the actual signal display mode of the CDP 311 control panel)		
	Freq		
	Current		
	Power		
99 Start-up Data			
99.1 Language	English	English	
99.2 Application Macro	Factory	Factory	
99.3 Applic Restore	No	No	
99.4 Motor Ctrl Mode	Dtc	Dtc	
99.5 Motor Nom Voltage	U_N	380	
99.6 Motor Nom Current	I_{hd}	195,0 A	
99.7 Motor Nom Freq	50 Hz	100 Hz	
99.8 Motor Nom Speed	3000 rpm	5970 rpm	
99.9 Motor Nom Power	P_N	110 kW	
99.10 Motor Id Run	No	No	
10 Start/Stop/Dir			
10.1 Ext1 Strt/Stp/Dir	DI 1P, 2P, 3	DI1	
10.2 Ext2 Strt/Stp/Dir	Not Sel	Not Sel	
10.3 Direction	Forward	Forward	
11 Reference Select			
11.1 Keypad Ref Sel	Ref1 (rpm)	Ref1 (rpm)	
11.2 Ext1/Ext2 Select	Ext1	Ext1	
11.3 Ext Ref1 Select	AI1	AI2	
11.4 Ext Ref1 Minimum	0 rpm	0 rpm	
11.5 Ext Ref1 Maximum	1500 rpm	6000 rpm	
11.6 Ext Ref2 Select	Keypad	Keypad	
11.7 Ext Ref2 Minimum	0%	0%	
11.8 Ext Ref2 Maximum	100%	100%	

Parameter	Factory	Stal Setting	Custom Setting
12 Constant speed			
12.1 Const Speed Sel	DI 5,6	Not Sel	
12.2 Const Speed 1	300 rpm	0 rpm	
12.3 Const Speed 2	600 rpm	0 rpm	
12.4 Const Speed 3	900 rpm	0 rpm	
12.5 Const Speed 4	300 rpm	0 rpm	
12.6 Const Speed 5	0 rpm	0 rpm	
12.7 Const Speed 6	0 rpm	0 rpm	
12.8 Const Speed 7	0 rpm	0 rpm	
12.9 Const Speed 8	0 rpm	0 rpm	
12.10 Const Speed 9	0 rpm	0 rpm	
12.11 Const Speed 10	0 rpm	0 rpm	
12.12 Const Speed 11	0 rpm	0 rpm	
12.13 Const Speed 12	0 rpm	0 rpm	
12.14 Const Speed 13	0 rpm	0 rpm	
12.15 Const Speed 14	0 rpm	0 rpm	
12.16 Const Speed 15	0 rpm	0 rpm	
13 Analogue Inputs			
13.1 Minimum AI1	0 V	0 V	
13.2 Maximum AI1	10 V	10 V	
13.3 Scale AI1	100%	100%	
13.4 Filter AI1	0.1 s	0.1 s	
13.5 Invert AI1	No	No	
13.6 Minimum AI2	0 mA	0 mA	
13.7 Maximum AI2	20 mA	20 mA	
13.8 Scale AI2	100%	100%	
13.9 Filter AI2	0.1 s	0.1 s	
13.10 Invert AI2	No	No	
13.11 Minimum AI3	0 mA	0 mA	
13.12 Maximum AI3	20 mA	20 mA	
13.13 Scale AI3	100%	100%	
13.14 Filter AI3	0.1 s	0.1 s	
13.15 Invert AI3	No	No	
14 Relay Outputs			
14.1 Relay RO1 Output	Ready	Ready	
14.2 Relay RO2 Output	Running	Running	
14.3 Relay RO3 Output	Fault(-1)	Fault(-1)	

Parameter	Factory	Stal Setting	Custom Setting
15 Analouge Outputs			
15.1 Analouge Output 1	Speed	Reference	
15.2 Invert AO1	No	No	
15.3 Minimum AO1	0 mA	0 mA	
15.4 Filter AO1	0.1 s	0.1 s	
15.5 Scale AO1	100%	100%	
15.6 Analouge Output 2	Current	Frequency	
15.7 Invert AO2	No	No	
15.8 Minimum AO2	0 mA	0 mA	
15.9 Filter on AO2	2 s	2 s	
15.10 Scale AO2	100%	100%	
16 System Contr Inputs			
16.1 Run Enable	Yes	DI1	
16.2 Parameter Lock	Open	Open	
16.3 Pass Code	0	0	
16.4 Fault Reset Sel	Not Sel	Not Sel	
16.5 User Macro IO Chg	Not Sel	Not Sel	
20 Limits			
20.1 Minimum Speed	(calculated)	1200 rpm	
20.2 Maximum Speed	(calculated)	6000 rpm	
20.3 Maximum Current	200% I_{hd}	200% I_{hd}	
20.4 Maximum Torque	300%	300%	
20.5 Overvoltage Ctrl	On	On	
20.6 Undervoltage Ctrl	On	On	
21 Start/Stop			
21.1 Start Function	Auto	Auto	
21.2 Const Magn time	300 ms	300 ms	
21.3 Stop Function	Coast	Coast	
21.4 DC Hold	Off	Off	
21.5 DC Hold Speed	5 rpm	5 rpm	
21.6 DC Hold Curr	30%	30%	

Parameter	Factory	Stal Setting	Custom Setting
22 Accel/Decel			
22.1 Acc/Dec 1/2 Sel	DI4	ACC/DEC 1	
22.2 Acceler Time 1	3 s	1 s	
22.3 Deceler Time 1	3 s	1 s	
22.4 Acceler Time 2	60 s	60 s	
22.5 Deceler Time 2	60 s	60 s	
22.6 Acc/Dec Ramp Shpe	Linear	Linear	
23 Speed Ctrl			
23.1 Gain Rel	10	10	
23.2 Integration Time	2.5 s	2.5 s	
23.3 Derivation Time	0.0 ms	0.0 ms	
23.4 Acc Compensation	0 s	0 s	
23.5 Slip Gain	100.0%	100.0%	
23.6 Autotune Run?	No	No	
25 Critical Speeds			
25.1 Crit Speed Select	Off	Off	
25.2 Crit Speed 1 Low	0 rpm	0 rpm	
25.3 Crit Speed 1 High	0 rpm	0 rpm	
25.4 Crit Speed 2 Low	0 rpm	0 rpm	
25.5 Crit Speed 2 High	0 rpm	0 rpm	
25.6 Crit Speed 3 Low	0 rpm	0 rpm	
25.7 Crit Speed 3 High	0 rpm	0 rpm	
25.8 Crit Speed 4 Low	0 rpm	0 rpm	
25.9 Crit Speed 4 High	0 rpm	0 rpm	
25.10 Crit Speed 5 Low	0 rpm	0 rpm	
25.11 Crit Speed 5 High	0 rpm	0 rpm	
26 Motor Control			
26.1 Flux Optimization	No	No	
26.2 Flux Braking	Yes	No	
30 Fault Functions			
30.1 AI<Min Function	Fault	No	
30.2 Panel Loss	Fault	Fault	
30.3 External Fault	Not Sel	Not Sel	
30.4 Mot Therm Prot	No	No	
30.5 Motor Therm P Mode	Dtc	Dtc	
30.6 Motor Therm Time	(calculated)	(calculated)	

Parameter	Factory	Stal Setting	Custom Setting
30 Fault Functions (continued)			
30.7 Motor Load Curve	100%	100%	
30.8 Zero Speed Load	74%	74%	
30.9 Break Point	45 Hz	90 Hz	
30.10 Stall Function	Fault	Fault	
30.11 Stall Freq Hi	20 Hz	20 Hz	
30.12 Stall Time	20 s	20 s	
30.13 Underload Func	No	No	
30.14 Underload Time	600 s	600 s	
30.15 Underload Curve	1	1	
30.16 Motor Phase Loss	Fault	Fault	
30.17 Earth Fault	Fault	Fault	
31 Automatic Reset			
31.1 Number of trials	2	0	
31.2 Trial Time	30.0 s	30.0 s	
31.3 Delay Time	0.0 s	0.0 s	
31.4 Overcurrent	No	No	
31.5 Overvoltage	No	No	
31.6 Undervoltage	No	No	
31.7 AI Signal<Min	No	No	
32 Supervision			
32.1 Speed 1 Function	No	No	
32.2 Speed 1 Limit	0 Hz	0 rpm	
32.3 Speed 2 Function	No	No	
32.4 Speed 2 Limit	0 Hz	0 rpm	
32.5 Current Function	No	No	
32.6 Current Limit	0 A	0 A	
32.7 Torque 1 Function	No	No	
32.8 Torque 1 Limit	0%	0%	
32.9 Torque 2 Function	No	No	
32.10 Torque 2 Limit	0%	0%	
32.11 Ref 1 Function	No	No	
32.12 Ref 1 Limit	0 rpm	0 rpm	
32.13 Ref 2 Function	No	No	
32.14 Ref 2 Limit	0%	0%	
32.15 Act 1 Function	No	No	
32.16 Act 1 Limit	0%	0%	
32.17 Act 2 Function	No	No	
32.18 Act 2 Limit	0%	0%	

Parameter	Factory	Stal Setting	Custom Setting
33 Information			
33.1 Dtc Sw Version	(Version)	(Version)	
33.2 Appl Sw Version	(Version)	(Version)	
33.3 Test Date	(Date)	(Date)	
33.4 Serial Number	(Serial number)	(Serial number)	
34 Process Speed	(Visible only with application software version 2.5 or later)		
34.1 Scale	100	100	
34.2 Unit	%	%	
98 Option Modules			
98.1 Encoder Module	No	No	
98.2 Comm. Module	No	No	
98.3 DI/O Ext Module 1	No	No	
98.4 DI/O Ext Module 2	No	No	
98.5 DI/O Ext Module 3	No	No	
98.6 Ext AI/O Module	No	No	
98.7 Memory Module	No	No	

StalExcom dataset list - FV19
Valid from version 2.30

BOOLEAN

Data-set	*Use*	*Bit*	*R/W*
14	**Acknowledge alarms**		W
	Acknowledge all alarms	0	
25	**Active alarms**		R
	See dataset 26		
26	**Not acknowledge alarms**		RW
	High discharge pressure	0	
	Low suction pressure	1	
	High suction pressure	2	
	High discharge temperature	4	
	Low discharge gas superheat	5	
	No start feedback (freq. conv.)	6	
	Alarm frequency converter	7	
	Discharge pressure guard	8	
	Motor fan overload protection	9	
	Motor temperature guard	10	
	Motor fan feedback	11	
	Emergency stop	13	
	Min. press/temp guard	14	
	Low compressor oil level	16	
	High diff. pressure oil filter	17	
	Frequency converter failure	19	
	Low oil separator temperature	20	
	Low compressor oil temperature	21	
	High compressor oil temperature	22	
	Low pressure ratio	23	
	Oil pump not running	25	
	Oil pump overload protection	26	
	Motor speed too low	27	
29	**Status 1**		R
	Compressor running	0	
	Start key	1	
	Start delay interlocking on	2	
	Any interlocking	3	
	Some alarm not reset	4	
	External start (digital input)	5	
	External start (Stalexcom)	6	
	Manual	7	
	Remote	8	
	For internal use	12–15	
30	**Status 2**		RW
	External start	0	
31	**Sequence controller**		RW
	Start/stop	0	

REAL

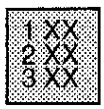
Data-set	*Use*	*R/W*
41	**Capacity valve position (%)**	R
42	**Suction pressure (bara)**	R
43	**Discharge pressure (bara)**	R
44	**Oil pump pressure (bar)**	R
45	**Compressor contr. actual value (bar(a/g) or °C)**	R
46	**Discharge gas temperature (°C)**	R
47	**Oil temperature in oil separator (°C)**	R
48	**Oil temperature in compressor (°C)**	R
49	**Motor current (A)**	R
50	**Suction gas saturated temp. (°C)**	R
51	**Discharge gas saturated temp. (°C)**	R
52	**Compressor controller setpoint (bar(a/g) or °C)**	RW
53	**External capacity control (%) (bar(a/g) or °C)**	RW
54	**Sequence controller actual value**	R
55	**Sequence controller setpoint (bar(a/g) or °C)**	RW

INTEGER

Data-set	*Use*	*R/W*
91	**Running hour**	R
92	**Sequence order**	RW

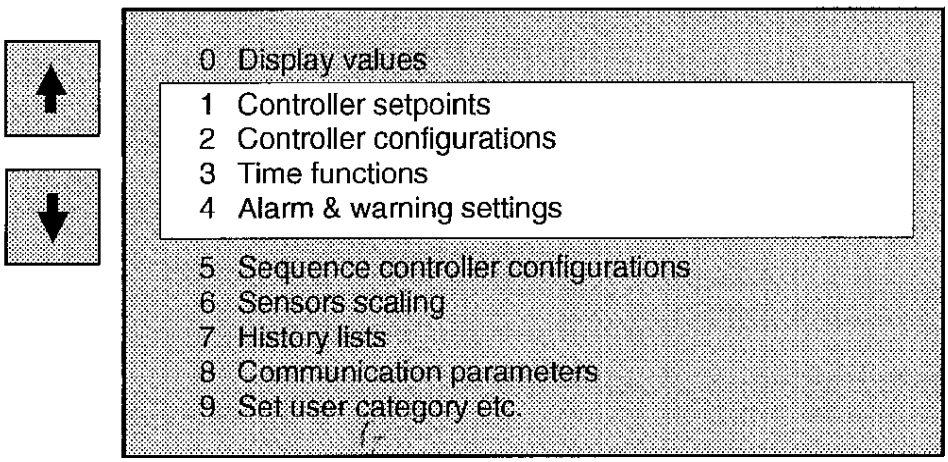
Configuration and Operating Instructions
Valid from Ver. 2.44/3.04

FV 19



Configuration menu

Parameter setting menu



1 Controller setpoints

0 Up one menu level
1 Compressor controller setpoint
2 Disch. press. limit controller setp.
4 Min. press./temp. limit contr. setp.
5 Compressor controller on/off limit
6 Setpoint limits

1.1 Compressor controller setpoint

Compressor controller setpoint
(0.0°C)
Min. setpoint -40.0°C
Max. setpoint 10.0°C

1.2 Disch. press. limit controller setp.

Disch. press. limit controller setpoint
(26.0 bara)
Min. setpoint 13.0 bara
Max. setpoint 26.0 bara

1.4 Min. press./temp. limit contr. setp.

Min. press./ temp. limit controller setp
(-40.0°C)
Min. setpoint -40.0°C
Max. setpoint 10.0°C

1.5 Compressor controller on/off limit

Compr. stop, deviation from setpoint
(-3.0°C)
Compr. start, deviation from setpoint
(1.0°C)

1.6 Setpoint limits SE

0 Up one menu level
1 Compressor controller setpoint
2 Disch. press. limit controller setp.
4 Min. press./temp. limit contr. setp.

1.6.1 Compressor controller setpoint SE

Min. setpoint
(-40.0°C)
Max. setpoint
(10.0°C)

1.6.2 Disch. press. limit controller setp. SE

Min. setpoint
(13.0 bara)
Max. setpoint
(26.0 bara)

1.6.4 Min. press./temp. limit contr. setp. SE

Min. setpoint
(-40.0°C)
Max. setpoint
(10.0°C)

2 Controller configurations SE

0 Up one menu level
1 Capacity controller
2 Economizer & liq. inj. controller
3 Oil system controllers

2.1 Capacity controller SE

0 Up one menu level
1 Compressor controller
2 Discharge press. limit controller
4 Min. press./temp limit controller
5 Min. capacity
6 Max. capacity variation/sec

2.1.1 Compressor controller SE

P-band (10.0°C)
I-time (60 sec)
D-time (0.0 sec)
Dead zone (0.0°C)

2.1.2 Discharge press. limit controller SE

P-band (2.0 bara)
I-time (60 sec)
D-time (0.0 sec)
Dead zone (0.0 bar)

2.1.4 Min. press./temp. limit controller SE

P-band (10.0°C)
I-time (60 sec)
D-time (0.0 sec)
Dead zone (0.0°C)

2.1.5 Min. capacity SE

Min. capacity
(xxx%)
Min xxx%

2.1.6 Max. capacityvariation/sec SE

Max. capacity variation/sec
Increase/sec (1.0%)
Decrease/sec (100.0%)

2.2 Economizer & liq. inj. controllers SE

0 Up one menu level
1 Economizer controller
2 Liquid injection controller (on/off)
3 Liquid injection controller (PID)

2.2.1 Economizer controller SE

Economizer control
Limit (70%)
Hysterisis (10%)

2.2.2 Liquid injection controller (on/off) SE

Liquid injection control
Limit (120.0°C)
Hysterisis (10.0°C)

2.2.3 Liquid injection controller (PID) SE

Setpoint (60.0°C)
P-band (60.0°C)
I-time (20 sec)
D-time (0.0 sec)

2.3 Oil system controllers SE

0 Up one menu level
1 Oil heater temp. controller
2 Oil heater superheat controller
3 Oil cooler controller (on/off)
4 Oil cooler controller setpoint
5 Oil cooler controller PID values
6 Compressor start, oil level
7 (P1-P2) limit for oil pump operation

2.3.1 Oil heater temp. controller SE

Oil heater (temperature) control
Limit (40.0°C)
Hysteresis (5.0°C)

2.3.2 Oil heater superheat controller SE

Oil heater (superheat) control
Limit (5.0°C)
Hysteresis (5.0°C)

2.3.3 Oil cooler controller (on/off) SE

Oil cooler control
Limit (40.0°C)
Hysteresis (5.0°C)

2.3.4 Oil cooler controller setpoint SE

Oil cooler controller setpoint
(40.0°C) _____
Min. setpoint 10.0°C
Max setpoint 100.0°C

2.3.5 Oil cooler controller PID values SE

P-band (20.0°C) _____
I-time (60 sec)
D-time (0.0 sec)
Dead zone (0.0°C)

2.3.6 Compressor start, oil level SE

Compressor start oil level
Limit (45 sec) _____

2.3.7 (P1-P2) limit for oil pump operation SE

Oil pump pressure start level
Limit (3.0 bar) _____
Hysteresis (1.0 bar)

3 Time functions

0 Up one menu level
1 Restart delay
2 Stop/start delay
3 Capacity load delay
4 Economizer start delay
5 Unloaded start time
6 Stop delay time
7 Running time
8 Set date and time

3.1 Restart delay SE

Restart delay time
(15 min) _____

3.2 Stop/start delay SE

Stop/start delay time
(1 min) _____

3.3 Capacity load delay SE

Capacity load delay
(0 min) _____

3.4 Economizer start delay SE

Economizer start delay time
(0 min) _____

3.5 Unloaded start time SE

Unloaded start time
(15 sec) _____

3.6 Stop delay time SE

Delay time (10 sec) _____

3.7 Running time SE

Hours run
(0 hour) _____

3.8 Set date and time

0 Up one menu level
1 Set date
2 Set time

3.8.1 Set date

******** 1996-03-18 15:39:44 ********
Year _____
Month
Day

3.8.2 Set time

```
********1996-03-18 15:39:44********
Hour
Minute
Second
```

4 Alarm & warning settings

```
0 Up one menu level
1 Internal monitors
2 External monitors
3 Oil system monitors
4 Warnings
5 Oil system warnings
```

4.1 Internal monitors SE

```
0 Up one menu level
1 High discharge pressure
2 Low suction pressure
3 High suction pressure
4 High discharge temperature
5 Low discharge superheat
6 Low pressure ratio
```

4.1.1 High discharge pressure SE

```
High discharge pressure
Limit ( 26.0 bara )
```

4.1.2 Low suction pressure SE

```
Low suction pressure
Limit ( 0.4 bara )
On delay ( 30 sec )
```

4.1.3 High suction pressure SE

```
High suction pressure
Limit ( 10.0 bara )
On delay ( 30 sec )
```

4.1.4 High discharge temperature SE

```
High discharge gas temperature
Limit ( 120.0°C )
```

4.1.5 Low discharge superheat SE

```
Low discharge gas superheat
Limit ( 15.0°C )
Delay during startup
Startup delay ( 360 sec )
```

4.1.6 Low pressure ratio SY

```
Low pessure ratio
Limit ( 1.50 )
On delay ( 10 sec )
Startup delay ( 360 sec )
```

4.2 External monitors SE

```
0 Up one menu level
1 Frequence conv. feedback delay
2 Frequence converter alarm delay
3 Frequence converter failure delay
4 Min. press./temp. monitor delay
5 Motor fan feedback delay
```

4.2.1 Frequence conv. feedback delay SE

```
No start feedback
Startup delay ( 5 sec )
```

4.2.2 Frequence converter alarm SE

```
Alarm frequence converter
Startup delay ( 15 sec )
```

4.2.3 Frequence converter failure delay SE

Frequence converter failure
On delay (20 sec) _____
Motor power failure
Startup delay (20 sec)

4.2.4 Min press./temp. monitor delay SE

Min. press./temp. monitor
On delay (2 sec) _____

4.2.5 Motor fan feedback SE

Motor fan feedback
On delay (5 sec) _____

4.3 Oil system monitors SE

0 Up one menu level

2 Low oil separator temperature
3 Low compressor oil temperature
4 High compressor oil temperature
5 Compressor oil level monitor delay

6 High oil filter difference pressure

4.3.2 Low oil separator temperature SE

Low oil separator temperature
Limit (20.0°C) _____

4.3.3 Low compressor oil temperature SE

Low compressor oil temperature
Limit (20.0°C) _____
Startup delay (360 sec)

4.3.4 High compressor oil temperature SE

High compressor oil temperature
Limit (60.0°C) _____
On delay (2 sec)

4.3.5 Compressor oil level monitor delay SY

Low compressor oil level
On delay (2 sec) _____
Delay during startup
Startup delay (30 sec)

4.3.6 High oil filter difference pressure SE

High diff. pressure oil filter
On delay (360 sec) _____

4.4 Warnings

0 Up one menu level

1 High discharge pressure warning
2 Low suction pressure warning
3 High suction pressure warning
4 Low pressure ratio warning

5 High discharge gas temp. warning
6 Low discharge gas superheat warning

4.4.1 High discharge pressure warning

Warning, high disch. pressure
Limit (27.0 bara) _____
On delay (30 sec)

4.4.2 Low suction pressure warning

Warning, low suction pressure
Limit (0.0 bara) _____
On delay (60 sec)

4.4.3 High suction pressure warning

Warning, high suction pressure
Limit (11.0 bara) _____
On delay (60 sec)

4.4.4 Low pressure ratio warning

Warning, low pressure ratio
Limit (0.00)
On delay (60 sec)

4.4.5 High discharge gas temp. warning

Warning, high discharge temp.
Limit (150.0°C)
On delay (60 sec)

4.4.6 Low disch. gas superheat warning

Warning, low discharge superheat
Limit (0.0°C)
On delay (60 sec)

4.5 Oil system warnings

0 Up one menu level

2 Low oil temp. in compressor warning
3 High oil temp. in compressor warning

4.5.2 Low oil temp. in compressor warning

Warning, low compr. oil temp.
Limit (-100.0°C)
On delay (60 sec)

4.5.3 High oil temp. in compressor warning

Warning, high compr. oil temp.
Limit (100.0°C)
On delay (60 sec)

5 Sequence controller configurations

0 Up one menu level

1 Controller start/stop
2 Setpoint
3 Sequence controller on/off limit
4 Stop delay time
5 PID values
6 Setpoint limit
7 Step up/down delay time
8 Up/down step capacity level
9 Sequence order

5.1 Controller start/stop

0 = Stop 1 = Start
(0)

5.2 Setpoint

Sequence controller setpoint
(0.0°C)
Min. setpoint -40.0°C
Max. setpoint 10.0°C

5.3 Sequence controller on/off limit

Seq. stop. deviation from setpoint
(-3.0°C)
Seq. start. deviation from setpoint
(1.0°C)

5.4 Stop delay time SE

Delay time (10 sec)

5.5 PID values SE

P-band (20.0°C)
I-time (120 sec)
D-time (0.0 sec)
Dead zone (0.0°C)

5.6 Setpoint limit SE

Min. setpoint
(-40.0°C)
Max. setpoint
(10.0°C)

5.7 Step up/down delay time SE

Seq. contr. step up delay
(60 sec)
Seq. contr. step. down delay
(60 sec)

5.8 Up/down step capacity level SE

Seq. contr. step cap. level
(50%)

5.9 Sequence order

Sequence order
(1)
Allowable numbers 1 - 8
Use 0 for no sequence order at all

6 Sensors scaling

0 Up one menu level

1 Pressure sensors
2 Motor current
3 External capacity control
4 Setpoint displacement

5 Step setpoint displacement
6 Capacity position
7 Oil cooler controller output

6.1 Pressure sensor SE

0 Up one menu level

1 Suction pressure
2 Discharge pressure
3 Oil pressure
4 Seq. controller pressure sensor

5 Compr. controller pressure sensor
6 Min. limit pressure sensor

6.1.1 Suction pressure SE

Min. inp. sign.% of FS	(	20.00)
Min. physical value	(	0.00)
Max. inp. sign. % of FS	(	100.00)
Max. physical value	(	15.00)

6.1.2 Discharge pressure SE

Min. inp. sign.% of FS	(	20.00)
Min. physical value	(	0.00)
Max. inp. sign. % of FS	(	100.00)
Max. physical value	(	30.00)

6.1.3 Oil pressure SE

Min. inp. sign.% of FS	(	20.00)
Min. physical value	(	0.00)
Max. inp. sign. % of FS	(	100.00)
Max. physical value	(	30.00)

6.1.4 Seq. controller pressure sensor SE

Min. inp. sign.% of FS	(	20.00)
Min. physical value	(	0.00)
Max. inp. sign. % of FS	(	100.00)
Max. physical value	(	15.00)

6.1.5 Compr. controller pressure sensor SE

Min. inp. sign. % of FS	(20.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(15.00)	

6.1.6 Min. limit pressure sensor SE

Min. inp. sign. % of FS	(20.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(15.00)	

6.2 Motor current SE

Min. inp. sign. % of FS	(0.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(xxx.xx)	

6.3 External capacity control SE

Min. inp. sign. % of FS	(0.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(100.00)	

6.4 Setpoint displacement

Min. inp. sign. % of FS	(0.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(10.00)	

6.5 Step setpoint displacement

Step setpoint displ.
(5.0°C) _____

6.6 Capacity poition SY

Min. inp. sign. % of FS	(0.00)	_____
Min. physical value	(0.00)	
Max. inp. sign. % of FS	(100.00)	
Max. physical value	(100.00)	

6.7 Oil cooler controller output SE

Min. physical value	(0.00)	_____
Min. iout sign. % of FS	(20.00)	
Max. physical value	(100.00)	
Max. out sign. % of FS	(100.00)	

7 History lists

0 Up one menu level
1 Alarm list
2 Warning list
3 Status list

8 Communication parameters SE

0 Up one menu level
1 EXCOM network
2 EXCOM address
3 EXCOM communication param. code

8.1 EXCOM network SE

EXCOM network
(1) _____

8.2 EXCOM address SE

EXCOM address
(0) _____

8.3 EXCOM communication parameter code SY

EXCOM com. param. code
(6712) _____

9 Set users category etc.

0 Up one menu level

1 User
2 Password
3 Language
4 Pressure unit

5 Change unit parameters
6 Reset unit parameters
7 Test mode
8 Change password

9.2 Password

Password _____

9.3 Language

0 = English 1 = xxxxx
(0) _____

9.4 Pressure unit

Bar: 0 = absolute 1 = gauge
(0) _____

9.5 Change unit parameters SE

(See Function Configuration)

9.6 Reset unit parameters SY

(See Function Configuration)

9.7 Test mode SE

Test mode
(0) _____

9.8 Change password SE

User password
(0) _____
Service password
(xxx)

Function Configuration

1

0 = English 1 = xxxxx
(0) _____

2

Refrigerant: (0) _____
1 = NH3 4 = R32
2 = R22 5 = R12
3 = R134a

3

Compressor: (1) _____
1 = F19
2 = F24 3 = F26

4

Max frequence (Hz)
(xxx) _____

5

0 = No, 1 = Yes (0) _____
Is the motor current measured?

6 When answer is 1 in window 5

Transformer ratio: (0) _____
Motor current measure transformer

7 When answer is 1 in window 5

Rated motor current
(0 A) _____
Min. setpoint 0 A
Max. setpoint xxx A

8

0 = No, 1 = Yes (0) _____
Use remaining set up as default?

When answer is 0 in window 8 window 9-34 will appear

9

0 = No, 1 = Yes (0) _____
Auto start after black out?

10

Sequence controller (0) _____
0 = Not used
1 = Cooling mode
2 = Heating mode

11 When answer is 1 or 2 in window 10

Sequence controller input (3) _____
1 = Temperature input
2 = Pressure input
3 = Pressure input as saturated temp.

12

Compressor controller (1) _____
0 = Not used
1 = Cooling mode
2 = Heating mode

13

Compressor controller input (3) _____
1 = Temperature input
2 = Pressure input
3 = Pressure input as saturated temp.

Function Configuration

1

0 = English 1 = xxxxx
(0) _____

2

Refrigerant: (0) _____
1 = NH3 4 = R32
2 = R22 5 = R12
3 = R134a

3

Compressor: (1) _____
1 = F19
2 = F24 3 = F26

4

Max frequence (Hz)
(xxx) _____

5

0 = No, 1 = Yes (0) _____
Is the motor current measured?

6 When answer is 1 in window 5

Transformer ratio: (0) _____
Motor current measure transformer

7 When answer is 1 in window 5

Rated motor current
(0 A) _____
Min. setpoint 0 A
Max. setpoint xxx A

8

0 = No, 1 = Yes (0) _____
Use remaining set up as default?

When answer is 0 in window 8 window 9-34 will appear

9

0 = No, 1 = Yes (0) _____
Auto start after black out?

10

Sequence controller (0) _____
0 = Not used
1 = Cooling mode
2 = Heating mode

11 When answer is 1 or 2 in window 10

Sequence controller input (3) _____
1 = Temperature input
2 = Pressure input
3 = Pressure input as saturated temp.

12

Compressor controller (1) _____
0 = Not used
1 = Cooling mode
2 = Heating mode

13

Compressor controller input (3) _____
1 = Temperature input
2 = Pressure input
3 = Pressure input as saturated temp.

14

0 = No, 1 = Yes (1) _____
Should the compressor controller be off in REMOTE mode?

15

Min. limit contr. input (0) _____
0 = Not used 1 = Temperature input
2 = Pressure input
3 = Pressure input as saturated temp.

16

0 = No, 1 = Yes (0) _____
Should the discharge pressure limit controller be used?

17

0 = No, 1 = Yes (0) _____
Should the limit controller give a warning if working?

18

Econonizer control mode (0) _____
0 = Always off
1 = Always on
2 = Compressor capacity controlled

19

Liquid injection mode (0) _____
0 = Always off
1 = Disch. temp. on/off controlled
2 = Disch. temp. PID controlled

20

Oil cooler mode (0) _____
0 = Always off
1 = Oil temperature on/off controlled
2 = Oil temperature PID controlled

21 When answer is 1 or 2 in window 20

0 = No, 1 = Yes (0) _____
Oil cooler output inverted?

22

0 = No, 1 = Yes (1) _____
Discharge pressure alarm enabled when not running?

23

0 = No, 1 = Yes (0) _____
Is the external start input used?

24 When answer is 1 in window 23

0 = No, 1 = Yes (0) _____
Is the external start input used only in REMOTE mode?

25

0 = No, 1 = Yes (0) _____
Is the external capacity control input used?

26

0 = No, 1 = Yes (0) _____
Is the freq. conv. feedback input used?

27

0 = No, 1 = Yes (0) _____
Is the freq. conv. alarm input used?

28

0 = No, 1 = Yes (0) _____
Is the motor fan feedback used?

29

0 = No, 1 = Yes (0) _____
Is the min. press./temp. mon. input used?

30

Dig-out max cap function (1) _____
1 = Cap. controller at 100% a time
2 = Capacity above a spec. value

31 When answer is 1 in window 30

Time in second (300) _____

32 When answer is 2 in window 30

Capacity value (95.0) _____

33

Analog setpoint displ. (0) _____
0 = Not used
1 = Compressor controller setpoint
2 = Sequence controller setpoint

34

Digital setpoint displ. (0) _____
0 = Not used
1 = Compressor controller setpoint
2 = Sequence controller setpoint

In case of alteration of refrigerant

WAIT, CALCULATING!