Danfoss

Quick Start Guide
ICAD 600A / ICAD 1200A

1

Push down

Oil

Tighten CW

2

Terminal box - not supplied by Danfoss

A
B
C
D
E
F
G

I
II
III
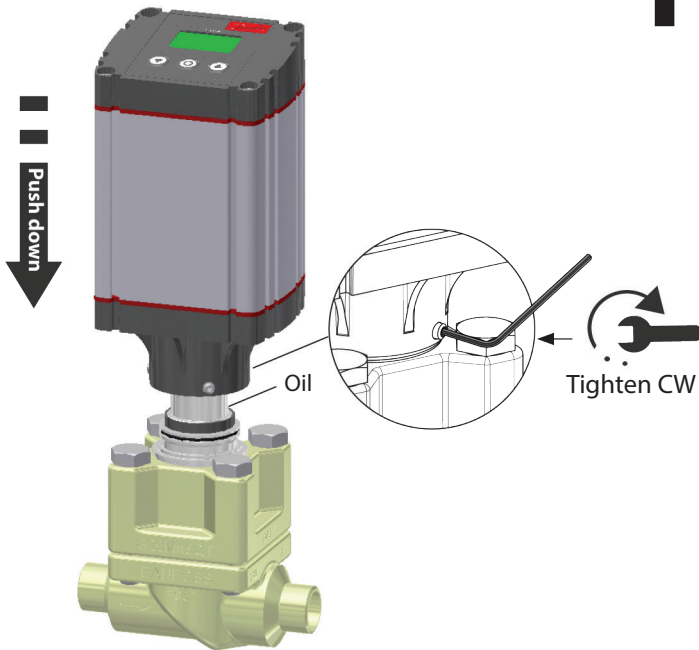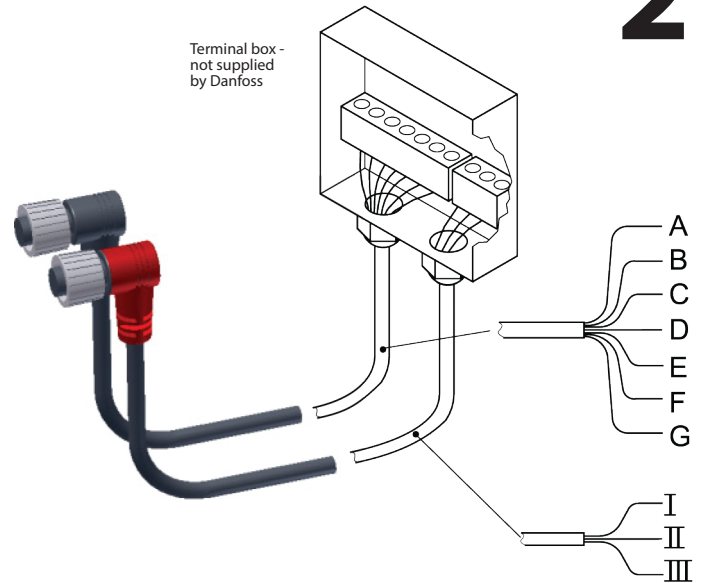
Ref.	Colour		Description	
A	Black	–	Common Alarm	Digital Ouput
B	Brown	–	ICM fully open	
C	Red	–	ICM fully closed	
D	Orange	–	GND ground	
E	Yellow	+	0/4 - 20 mA Input	
F	Green	+	0/2-10V input or digital input for on/off control	
G	Blue	+	0/4 - 20 mA Output	

I	Black	+	Fail safe supply Battery / UPS* 19 V d.c.
II	White	+	Supply voltage 24 V d.c.
III	Brown	–	

* Uninterruptable Power Supply

3

24 Volt d.c. ONLY

Please observe cable voltage drop
Distance between the applied d.c. transformer and the ICAD terminal box may cause a voltage drop. Cross section of cables and size of d.c. transformer must be calculated so that the voltage at all time **at the ICAD terminal box***, both during standstill and during operation of ICAD, is within this range:

Prefabricated ICAD cable length Code number		1.5 m 027H0426	3 m 027H0438	10 m 027H0427	15 m 027H0435
Voltage ICAD terminal (600A/1200A) [V d.c.]	Min.	21	22	23	24
	Max.	26.4			

* Do not measure inside the ICAD itself.

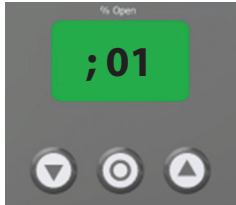| Decrease value	Edit / Enter	Increase value

Programming the ICAD

Note:
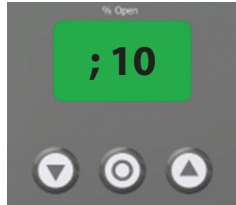If the keypad is not operated within 20 seconds; time out will automatically exit programming mode.

Valve size setup (mandatory)

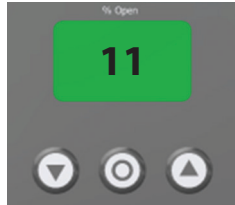**4**

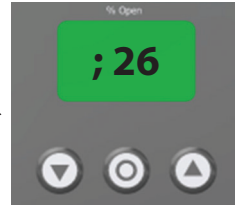When powering up the ICAD, A1 will flash in the display

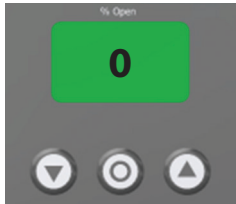| ; 01	; 10	11	; 26

→

Hold down ◎ for 2 seconds to enter programming mode.

Press ▲ and go to parameter 10. Press ◎

Press ▲ until you reach 11 (password). Press ◎

Press ▲ until you reach parameter 26 Press ◎
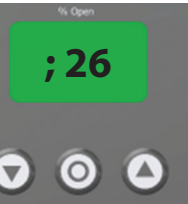
→

0		; 26	CA

Press ▼ or ▲ to select ICM size or CVE. Press ◎
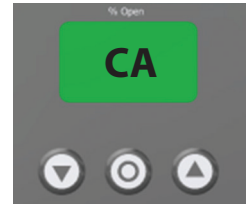
1: ICM 20 with ICAD 600A
2: ICM 25 with ICAD 600A
3: ICM 32 with ICAD 600A
4: ICM 40 with ICAD 1200A
5: ICM 50 with ICAD 1200A

6: ICM 65 with ICAD 1200A
7: ICM 100 with ICAD 1200A
8: ICM 125 with ICAD 1200A
9: ICM 150 with ICAD 1200A
10: CVE pilot with ICAD 1200A

Valve label ID:

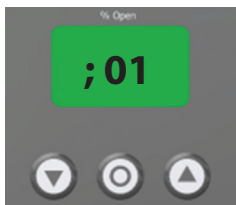| ICM 20	ICM 25-65	ICM 100-150
Danfoss MADE IN DENMARK ICM 20-A PS 52 bar/MWP 754 psig @ -60 - 120°C/-76 - 248°F HCFC,HFC,R744,R717 027H1020		Danfoss Made in Denmark ICM 125 PS52 / 754psig -60°C/-76°F to +120°C/+248°F Serial No. 300211

ICM/CVE & ICAD is now calibrating.

Hold down ◎ for 2 seconds to exit programming mode.

Changing analogue input signal (optional)

5

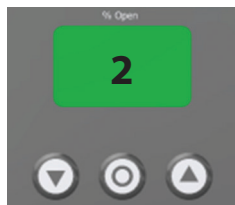| ; 01	; 03	2	; 03

→
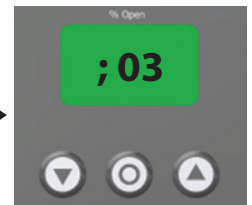
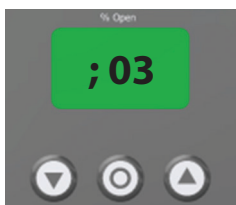Hold down ◎ for 2 seconds to enter programming mode.
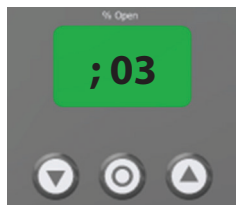
Press ▲ until you reach parameter 03. Press ◎

Press ▼ or ▲ to select analogue input signal.

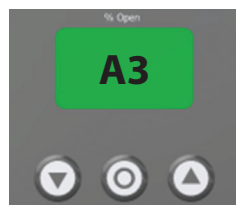1: 0-20 mA
2: 4-20 mA*
3: 0-10 V
4: 2-10 V
* default factory setting

Press ◎

; 03	A3

Hold down ◎ for 2 seconds to exit programming mode.

If A3 alarm occurs the analogue input signal is out of range.

Factory reset of ICAD

Disconnect power ❶

Press down ▼ and ▲ ❷ simultaneously while reconnecting power ❶

Release ▼ and ▲ ❷

Note:
If factory reset has been performed the ICAD will start flashing A1 in the display.

⚠

24 Volt d.c. ONLY

For further functions, programming possibilities and factory settings; please see ICAD instruction.