

Installation guide

Electric Expansion Valve

Type ETS 175L, ETS 250L, ETS 400L, ETS 500L

UK
CA

034R9828

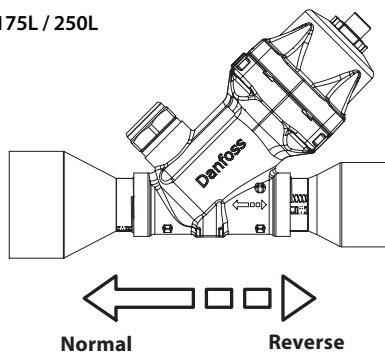


Compatible refrigerants / Kältemittel Kompatibilität / Fluides compatibles / Compatibilidad de refrigerantes / 适用的冷媒: R134a, R404A, R407A, R407C, R407F, R407H, R410A, R417A, R422A, R422B, R422D, R438A, R442A, R448A, R449A, R449B, R450A, R452A, R463A, R507A, R513A, R513B, R515A, R515B, R1234ze(E), R1234yf*, R516A* NOTE: For more details check datasheet. * only for oil free valves ETS 175L and 250L	Inlet fluid temperature / Eingangstemperaturbereich / entrée température du fluide / entrada temperatura líquida / 入口流体温度: Min. -40 °C / -40 °F Max. 70 °C / 158 °F Max. 95 °C / 203 °F for ETS 500L and oil free valves	Max. working pressure / Max. zul. Betriebsüberdruck / Pression de service max. / Presión de trabajo máx. / 最大工作压力 (gauge): MWP = 37 bar / 536 psig
Stepper motor type / Schrittmotortype / Type de moteur pas à pas / Tipo de motor a pasos / 步进电机形式: Bipolar	Allowable ambient temperature / Zulässige Umgebungstemperatur / Température ambiante admissible / Temperatura ambiente permisible / 允许的环境温度: Min. -40 °C / -40 °F Max. 70 °C / 158 °F	Total number of steps: / Max. Schritte: / Nombre de pas total: / Número de pasos total: / 总步数: ETS 175L, ETS 250L, ETS 400L 3810 full steps ETS 500L 4999 full steps
Nominal voltage / Nennspannung / Tension nominale / Voltaje nominal / 名义电压: 12 V DC	Resistance / Widerstand / résistance électrique / Resistencia / 电阻: 52.4 Ohm ±10% @ 25 °C	Phase current / Phasenstrom / Phase électrique / Corriente de fase / 相电流: Recommended: 200 mA at 200 pps

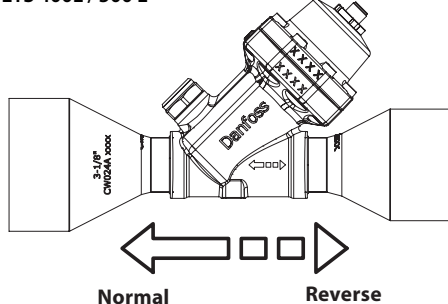
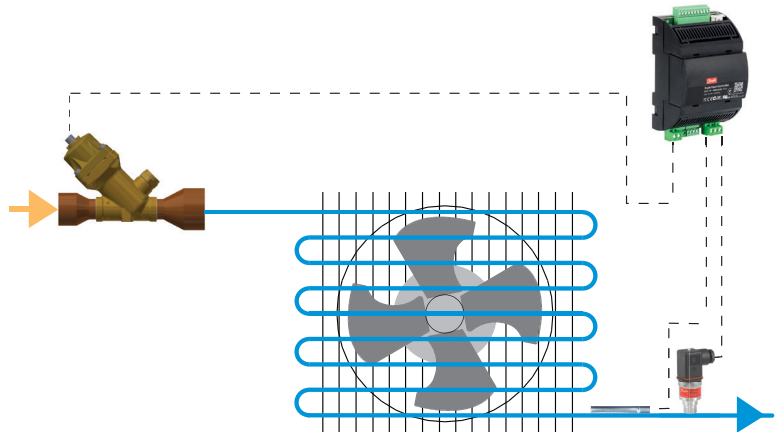
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Flow Direction / Durchflussrichtung / Sens d'écoulement /
Dirección del flujo / 流向:

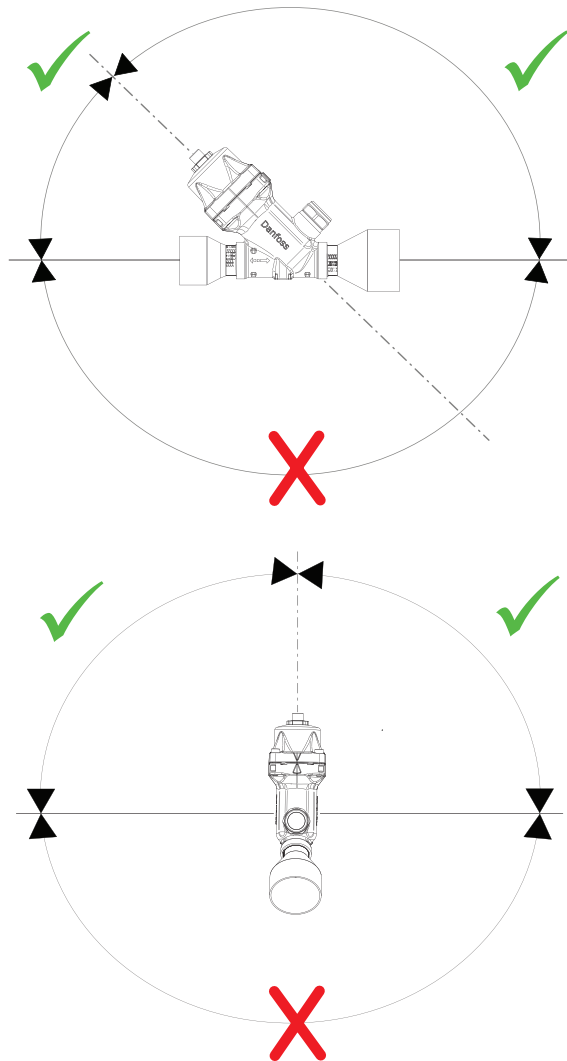
ETS 175L / 250L



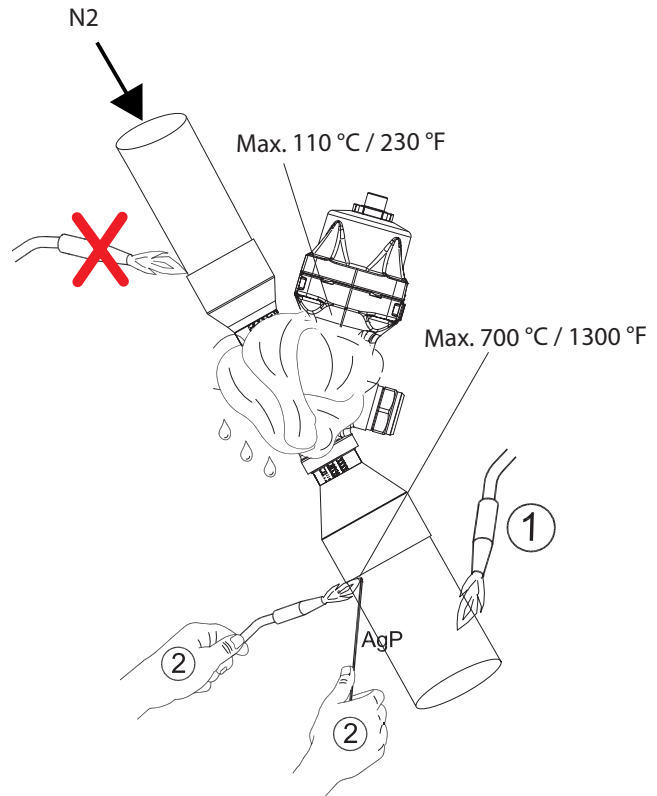
ETS 400L / 500 L


Application / Anwendung / Application / Aplicación / 应用:


Mounting / Einbau / Montage / Instalación / 安装:



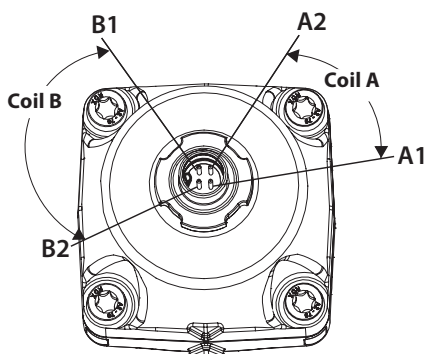
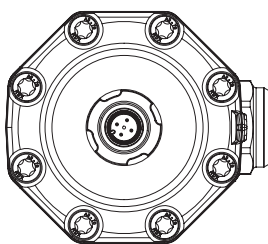
Brazing / Einbau / Montage / Instalación / 安装:



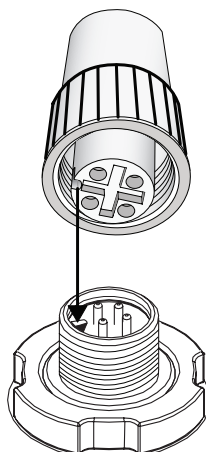
N2 gas from opposite side of soldering point.
 Schutzgas gegenüber der Lötstelle einströmen lassen.
 Refroidissement gaz ci-contre site de soudure.
 Corriente de N2 desde el lado opuesto a la soldadura.
 氮气保护从阀门焊接口的另一侧通入。

Electrical connections / Elektrische Anschlüsse / Connexions électriques / Conexiones eléctricas / 电气连接:

ETS 400L / 500L

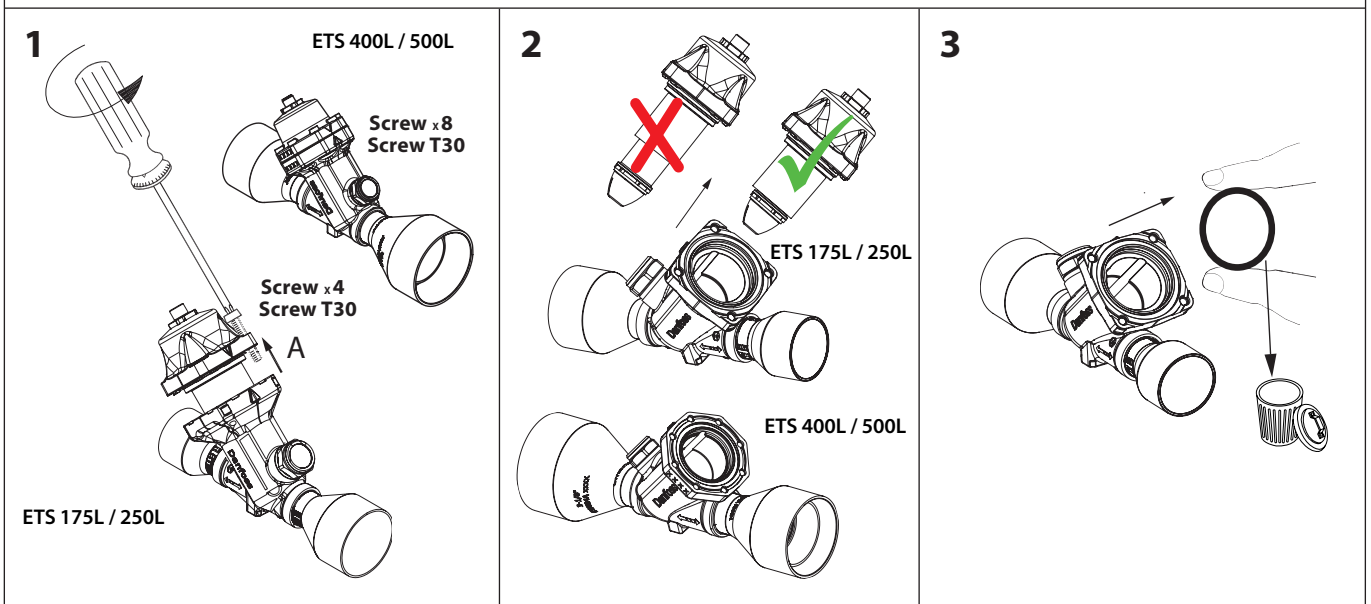


ETS 175L / 250L

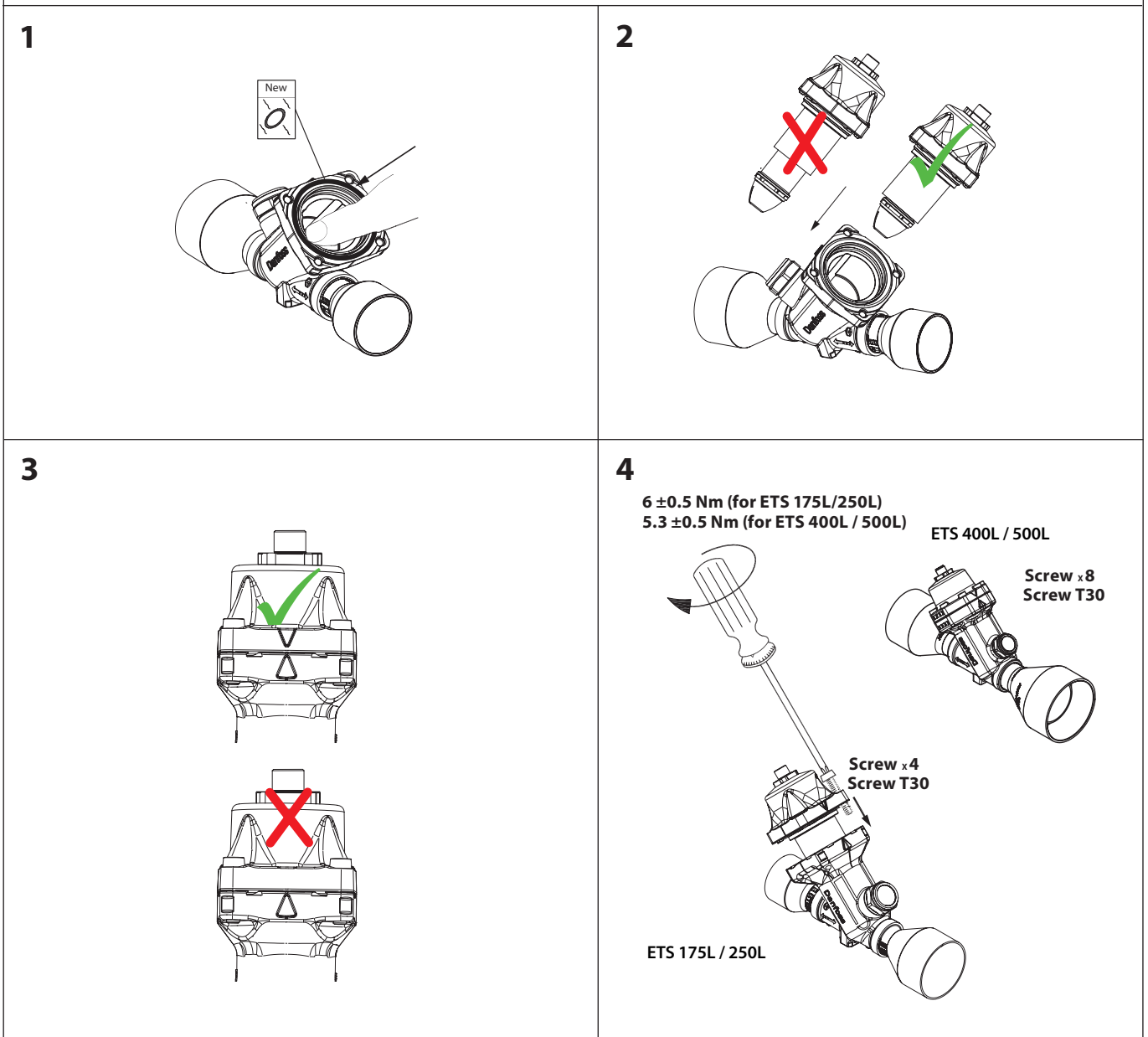


CLOSING ↑		Coil A		Coil B		OPENING ↓
		A1	A2	B1	B2	
	1	+	-	+	-	
	2	+	-	-	+	
	3	-	+	-	+	
	4	-	+	+	-	

Disassembling / Zerlegung / Désassemblage / Desmontaj / 拆卸:



Assembling / Zusammenbau / Assemblage / Montaje / 安装:





Warning! / Achtung! / Attention! / Advertencia! / 警告!

- Do not connect directly to AC/DC power source. Connect valve to appropriate controller/driver only. Do not operate valve while assembling or disassembling
- Bitte den ETS nicht direkt mit einer Spannungsquelle (Gleich- oder Wechselstrom) verbinden. Schließen Sie das Ventil nur an geeignete Regler/Steuergeräte an. Ventil bitte nicht in zerlegtem Zustand ansteuern.
- Ne pas raccorder directement le moteur à une alimentation AC / DC. Raccorder la vanne au régulateur approprié. Ne pas actionner la vanne pendant le montage ou le démontage.
- No aplicar tensión directamente a la válvula. Conectar la válvula a un controlador/driver adecuado. No haga funcionar la válvula durante el montaje o desmontaje.
- 请仅将阀门连接于合适的控制器/驱动器，勿直接与交流或直流电源连接。在安装和拆卸阀门时请勿操作电子膨胀阀。

Special note for R1234ze(E), R1234yf and R516A:

Ignition risk is evaluated in accordance to ISO5149/EN378 and IEC60335-2-40.

- Do not use valve outside of the stated temperature limits.
- Do not unplug when energized
- Must be installed in a suitable end use enclosure to protect the valve electrical plug against moisture, dust, dirt and impact.
- For countries where safety standards are not an indispensable part of the safety system Danfoss recommend the installer to get a third party approval of the system containing flammable refrigerant.

