




WRAS PRODUCT APPROVAL CERTIFICATE

Approval Number
240902017

Field of application	Products complying with the Water Supply (Water Fittings) Regulations 1999 (England & Wales), the Water Supply (Water Fittings) (Scotland) Byelaws 2014 and the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009.
Approval holder	Danfoss A/S
WRAS directory section	1350
Product type	Heat Exchangers
Model	XB05M, XB05H & XB05X RANGES OF HEAT EXCHANGERS
Basis of compliance	Regulator Specifications (TCS) / BS Standard
Valid from	September 2024
Date of expiry	September 2029
Authorised by	 Ian Hughes, WRAS Approvals Manager



The certificate by itself is not evidence of a valid WRAS Approval.
Confirmation of the current status of an approval must be obtained from
the WRAS Approvals Directory



Certificate issued: 10th September 2024

APPROVAL INFORMATION

Validity dates:	This approval is valid for fittings (as listed below in model) manufactured AND installed between September 2024 & September 2029
Section Number:	1350
Section title:	HEAT EXCHANGERS
Installation requirement notes:	R001 (IRN's are set out in Appendix A)
Product description:	Range of copper or stainless-steel brazed heat exchangers available with various number of plates as listed below. Maximum working pressure 25.0 Bar (copper brazed models). Maximum working pressure 10.0 Bar (stainless steel brazed models). Maximum operating temperature 100.0°C.
Size:	4G3/4 models = ¾" BSP, 4AYB models = 8mm porthole (XB05H-1-xx-2STS_10/10_S1_4AYB Only) or 15mm porthole for all other models, 4clip models = 15mm ID clip connection.
Identification Marking:	DANFOSS logo, model code, date of manufacture (YYYY/WW), PN and other technical data laser engraved into the body.
Factor:	Danfoss A/S
Model:	XB05M-1-xx-2CU_25/25_S1_4G3/4, XB05X-1-xx-2CU_25/25_S1_4G3/4, XB05H-1-xx-2CU_25/25_S1_4G3/4, XB05X-1-xx-2STS_10/10_S1_4G3/4, XB05H-1-xx-2STS_10/10_S1_4G3/4, XB05H-1-xx-2CU_25/25_S1_4AYB, XB05X-1-xx-2CU_25/25_S1_4AYB, XB05H-1-xx-2STS_10/10_S1_4AYB, XB05X-1-xx-2STS_10/10_S1_4AYB, XB05H-1-xx-2STS_10/10_S1_4AYB, XB05X-1-20-2CU_25/25_S1_4Clip, XB05X-1-20-2STS_10/10_S1_4Clip, XB05H-1-xx-2CU_25/25_S1_4Clip, XB05H-1-xx-2STS_10/10_S1_4Clip. XB05 - frame size (XB05 = 312 mm x 76 mm) M, X, H - heatplate corrugation (different dimple design) - 1 - one pass heat exchanger (all XB05 range is one pass) "xx" = number of plates from 8 to 70. HP material = always 2; meaning material of heatplate which is always 1.4404. Brazing material = Stainless steel brazed = StS, Copper brazed = Cu. Pressure = approved pressure for primary and secondary channels (for XB05 is 25 bar when copper brazed and 10 bar when stainless steel brazed visible from application list in 202_f2). Connection configuration = position of connections (on XB05 only S1 applies). Connection type = G3/4 threaded ¾ connections AYB - no connections. Clip - tailor made solder and / or clip connections; usually tailor made for specific customer.

APPENDIX A

INSTALLATION REQUIREMENTS & NOTES

You are advised to draw customers' attention to the installation requirements and notes set out below which must be followed to ensure that the fittings described above are installed in accordance with the requirements of the Regulations and Byelaws:

IRN R001

See text of entry for Installation Requirements or Notes.