



14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4
Tel.: 416.734.3300
Fax: 416.231.1626
Toll Free: 1.877.682.8772

www.tssa.org

May 19, 2016

EIGIL HANSEN
DANFOSS A/S
DBS-A E14 S4B, NORDBORGVEJ 81
NORDBORG DK-6430
DK

Service Request Type: BPV-Fitting Registration
Service Request No.: 1778790
Your Reference No.:
Registered to: DANFOSS A/S

Dear EIGIL HANSEN,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN No.: 0F18477.5
Main Design No.: PRESSURE TRANSMITTER TYPE: MBS, AKS, EMP
Expiry Date: 19-May-2026

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

A stamped copy of the approved registration and invoice for engineering services will be mailed to you shortly. Should you have any questions or require further assistance, however, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Zivko Gacevic P. Eng.
Mechanical Engineer, BPV
Tel.: 416-734-3429
Fax: 416-231-6183
Email: zgacevic@tssa.org



TECHNICAL STANDARDS &
SAFETY AUTHORITY
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings

I, Christian Dall Larsen, Director, Product Management & Tech.Support
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Danfoss A/S
(Name of Manufacturer)

Located at Nordborgvej 81, DK 6430 Nordborg +45 74882086 +45 74884318
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of

(Title of recognized North American Standard)
which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with EN 13445 ANSI B16.34 as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001 ISO/TS 16949 which has been verified by the following authority, BUREAU VERITAS.

The items covered by this declaration, for which I seek registration, are category Type F type fittings. In support of this application, the following information and/or test data are attached as follows:
Documents and pressure test report for pressure transmitter Type: MBS, AKS, EMP
(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____
the 3 day of December AD 2015.

Commissioner for Oaths:

(Printed name)

(Signature)

X
(Signature of Declarer)

FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category "F".

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Program
REGISTERED
C.R.N.: 0F18477.5
Signed: Suzanne Tur
Date: May 19, 2016

CRN: 0F18477.5

Registered by: ZIVKO GACEVIC

Dated: MAY 19, 2016

NOTE: This registration expires on MAY 19, 2026

Note: Please see the attachment for the scope of registration.
z.g. 5119/16



Scope for CRN registration of Danfoss pressure transmitter.

Date 2016.05.09

Danfoss A/S at the division Industrial Automation Nordborg Denmark are producing pressure transmitter mainly for refrigeration applications.

This application covers all the products in the type designations:

- MBS
- AKS
- EMP

The principal design for all types are a metal housing made of stainless steel and a pressure sensor made of stainless steel housing containing a stainless steel diaphragm and piezo electrical measuring device.

The differences of the types are mainly in the design of the housings, mainly 5 types and then the different ratings of the specific types.

An overview of the types is shown on the Application drawing 060R3155.

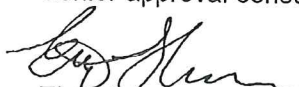
To verify the strength of the complete production range of each type the pressure tests are performed on samples with the highest rated design pressure.

Scope for this new application is the registration of the following pressure transmitters:

Type:	Temperature range	MAWP (bar)
MBS	-40° - +125°C (-40° - +257°F)	0 – 600 bar (0 - 8700 psi)
AKS	-40° - +85°C (-40° - +185°F)	0 – 160 bar (0 – 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 – 250 bar (0 – 3625 psi)

And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant


Eigil Hansen



26. 5/19/16

Type	ID-Type	Pressure range [bar] MIN / MAWP	Pressure range (psi) MIN / MAWP	Ambient temperature range [°C] TS MIN / TS Maks	Ambient temperature range [°F] TS MIN / TS MAKES
MBS 32	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 33	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 32R	A	0,00 - 6,00 bar	0,00 - 72,62 psi	-40 - 85 °C	-40 - 185 °F
MBS 33M	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2000	A	-1,00 - 3,00 bar	-14,50 - 43,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 2100	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2150	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2200	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-20 - 125 °C	-4 - 257 °F
MBS 2250	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-20 - 125 °C	-4 - 257 °F
MBS 3000	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 3053	A	0,00 - 6,00 bar	0,00 - 87,02 psi	-40 - 85 °C	-40 - 185 °F
MBS 3100	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3150	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3153	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 3200	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 125 °C	-40 - 257 °F
MBS 3250	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 3300	C	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 3350	C	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
MBS 4050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 4201	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
MBS 4251	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 4500	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
MBS 4550	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 85 °C	-40 - 185 °F
MBS 4701	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
MBS 4751	A	0,00 - 500,00 bar	0,00 - 7.251,89 psi	-40 - 85 °C	-40 - 185 °F
MBS 5150	D	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 5153	D	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 8200	E	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 8250	E	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
AKS 32	A	-1,00 - 50,00 bar	-14,50 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	-1,00 - 34,00 bar	-14,50 - 493,13 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	0,00 - 60,00 bar	0,00 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 33	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 1008	A	0,00 - 48,26 bar	0,00 - 700,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 2050	A	-1,00 - 159,00 bar	-14,50 - 2.308,10 psi	-40 - 85 °C	-40 - 185 °F
AKS 3000	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
AKS 3050	A	-1,00 - 25,00 bar	-14,50 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
EMP 2	B	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 100 °C	-40 - 212 °F

THIS IS PART OF
CRN 0F18477.5
 Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

Z. G. 5/19/16



505 - 6th Street, Suite 200
New Westminster, BC V3L 0E1

Toll Free: 1-866-566-SAFE
Fax: (778) 396 - 2064
www.safetyauthority.ca

TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ON M9W 6N9

Date: August 9, 2016
Account #: 35231
Journal #: 66135
Our File #: 5603096

Attn: TANYA FRANCIS

Re: Application for Design Registration

The design, as detailed in your, TSSA SR# 1886366, for a Fitting is accepted for registration as follows:

Registered To: DANFOSS AS **CRN:** 0F18477.51

MDMT: -40 deg C

MAWT: 125 deg C

MAWP: 8700 psig

Drawing #: 060R3155

Drawing Revision: 00

Conditions Of Registration:

Registration of Pressure Transmitters Type MBS, AKS, EMP as per scope of registration sheets (2 pages).

This design was registered based on a technical review performed by the province of initial registration in accordance with the Association of Chief Inspectors policy on reciprocal recognition of design review.

Reviewer's Notes:

As required by CSA B51 4.2.1, this registration expires on May 19, 2026. This CRN is valid until the expiry date as long as the Manufacturer maintains a valid quality control program verified by an acceptable third-party agency until that date. Should the certification of the quality control program lapse before the expiry date, this registration shall become void.

Contact me if you have any questions. The invoice for registration will be forwarded under separate cover.

SHARON PETERS

boiler.designregistration@safetyauthority.ca
Design Administration

cc:



Scope for CRN registration of Danfoss pressure transmitter.

Date 2016.05.09

Danfoss A/S at the division Industrial Automation Nordborg Denmark are producing pressure transmitter mainly for refrigeration applications.

This application covers all the products in the type designations:

- MBS
- AKS
- EMP

The principal design for all types are a metal housing made of stainless steel and a pressure sensor made of stainless steel housing containing a stainless steel diaphragm and piezo electrical measuring device.

The differences of the types are mainly in the design of the housings, mainly 5 types and then the different ratings of the specific types.

An overview of the types is shown on the Application drawing 060R3155.

To verify the strength of the complete production range of each type the pressure tests are performed on samples with the highest rated design pressure.

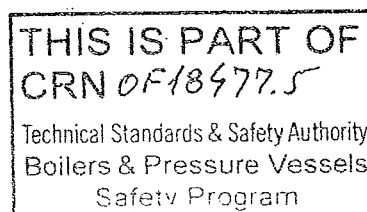
Scope for this new application is the registration of the following pressure transmitters:

Type:	Temperature range	MAWP (bar)
MBS	-40° - +125°C (-40° - +257°F)	0 – 600 bar (0 - 8700 psi)
AKS	-40° - +85°C (-40° - +185°F)	0 – 160 bar (0 – 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 – 250 bar (0 – 3625 psi)

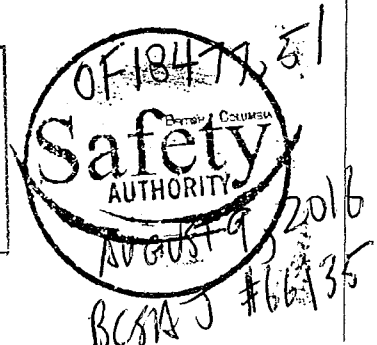
And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant


Eigil Hansen



2.G. 5/19/2016



Type	ID Type	Pressure range (bar) MIN / MAWP	Pressure range (psi) MIN / MAWP	Ambient temperature range [°C] TS MIN / TS Maks	Ambient temperature range [°F] TS MIN / TS MAKS
✓ MBS 32	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 33	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 32R	A	0,00 - 5,00 bar	0,00 - 72,52 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 33M	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 2000	A	-1,00 - 3,00 bar	-14,50 - 43,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 2050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 2100	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 2150	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 2200	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-20 - 125 °C	-4 - 257 °F
✓ MBS 2250	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-20 - 125 °C	-4 - 257 °F
✓ MBS 3000	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3053	A	0,00 - 6,00 bar	0,00 - 87,02 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3100	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3150	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3163	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 3200	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 3250	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 3300	C	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 3350	C	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 4050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 4201	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 4251	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
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✓ MBS 4751	A	0,00 - 500,00 bar	0,00 - 7.251,89 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 5150	D	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 5153	D	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
✓ MBS 8200	E	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
✓ MBS 8250	E	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
✓ AKS 32	A	-1,00 - 50,00 bar	-14,50 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
✓ AKS 32R	A	-1,00 - 34,00 bar	-14,50 - 493,13 psi	-40 - 85 °C	-40 - 185 °F
✓ AKS 32R	A	0,00 - 50,00 bar	0,00 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
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✓ AKS 3000	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
✓ AKS 3050	A	-1,00 - 25,00 bar	-14,50 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
✓ EMP 2	B	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 100 °C	-40 - 212 °F

THIS IS PART OF
CRN OF 18477.5
Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

2.6. 5/19/16





the pressure equipment safety authority

9410 - 20 Ave N.W.

Edmonton, Alberta, Canada T6N 0A4

Tel: (780) 437-9100 / Fax: (780) 437-7787

August 09, 2016

Attention: Tanya Francis
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO, ON M9W 6N9

The design submission, tracking number 2016-03398, originally received on June 17, 2016 was surveyed and accepted for registration as follows:

CRN : 0F18477.52 Accepted on: August 09, 2016

Reg Type: New Design Expiry Date: May 19, 2026

Drawing No. : SCOPE ATTACHED TO STATUTORY DECLARATION (AB-41) FORM

Fitting type: PRESSURE TRANSMITTER, TYPE: MBS, AKS, EMP

Design registered in the name of : DANFOSS A/S

Table with 4 columns: Description, MAWP, Design Temperature, MDMT. Rows include MBS, AKS, and EMP with their respective values.

The registration is conditional on your compliance with the following notes:

TSSA SR# 1886028

- This registration has been issued:

- 1. Based on TSSA's review.
2. Based on the Association of Chief Inspectors Policy on Reciprocal Recognition of Design Review.

This registration is valid only for fittings fabricated at the location(s) covered by the QC certificate attached to the accepted AB-41 Statutory Declaration form.

This registration is valid only until the indicated expiry date and only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date.

Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

Sincerely,

Zana Radisavljevic

RADISAVLJEVIC, ZANA, R.E.T.



STATUTORY DECLARATION
Registration of Fittings



I, Christian Dall Larsen,
Director Product Management & Techn. Support
(company title, e.g. vice president, plant manager, chief engineer) (must be in a position of authority)
of Danfoss A/S Nordborg factory
(name of manufacturer)
located at Nordborgvej 81, DK 6430 Nordborg
(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Safety Codes Act (check one)

- comply with the requirements of _____ which specifies the dimensions, (title of recognized North American Standard) materials of construction, pressure/temperature ratings and identification marking of the fittings, or
- are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ANSI 16.34 and EN 13445 as supported by the attached data which identifies the dimensions, materials of construction, pressure/temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacture of these fittings is controlled by a quality control program which has been verified by the following authority, BUREAU VERITAS as being suitable for the manufacture of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Type F

In support of this application, the following information, calculations and/or test data are attached:
Documents for Pressure transmitter Type: MBS, AKS, EMP

DECLARED before me at _____ in the _____ of _____
X this 3 day of December, 2015
(Month) (Year)
(print) Christian Dall Larsen X [Signature]
(sign) _____ (Signature of Applicant)
(A Commissioner for Oaths)

For Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the Safety Codes Act and CSA Standard B51, Clause 4.2, and is accepted for registration in Category F

Registration Number: 0 F 1 8 4 7 7 . 5 2 Jana R. RADICAVLJEVIC
(For the Administrator/Chief Inspector of Alberta)

Date Registered: AUG 09 2016 Expiry Date: May 19, 2026



Scope for CRN registration of Danfoss pressure transmitter.

Date 2016.05.09

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Scope for this new application is the registration of the following pressure transmitters:

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AKS	-40° - +85°C (-40° - +185°F)	0 – 160 bar (0 – 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 – 250 bar (0 – 3625 psi)

And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant


Eigil Hansen

ORCA

SAFETY CODES ACT - PROVINCE OF ALBERTA

REGISTRATION OF FITTINGS

REGISTRATION NO. **0 F 1 8 4 7 7 . 5 2**

DWG. NO. or CAT. NO. per scope

TYPE OF FITTINGS Pressure transmitter type MBS, AKS, EMP

AUG 09 2016

INITIALS Fauk R.

Date ZANA RADISAVLJEVIC, R.E.T.
DESIGN SURVEYOR

Type	ID-Type	Pressure range [bar] MIN / MAWP	Pressure range (psi) MIN / MAWP	Ambient temperature range [°C] TS MIN / TS Maks	Ambient temperature range [°F] TS MIN / TS MAKS
MBS 32	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 33	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 32R	A	0,00 - 5,00 bar	0,00 - 72,52 psi	-40 - 85 °C	-40 - 185 °F
MBS 33M	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2000	A	-1,00 - 3,00 bar	-14,50 - 43,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 2100	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2150	A	0,00 - 40,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 2200	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-20 - 125 °C	-4 - 257 °F
MBS 2250	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-20 - 125 °C	-4 - 257 °F
MBS 3000	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 3053	A	0,00 - 6,00 bar	0,00 - 87,02 psi	-40 - 85 °C	-40 - 185 °F
MBS 3100	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3150	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3153	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 3200	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 125 °C	-40 - 257 °F
MBS 3250	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 3300	C	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 3350	C	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
MBS 4050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 4201	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
MBS 4251	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 4500	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
MBS 4550	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 85 °C	-40 - 185 °F
MBS 4701	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
MBS 4751	A	0,00 - 500,00 bar	0,00 - 7.251,89 psi	-40 - 85 °C	-40 - 185 °F
MBS 5150	D	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 5153	D	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 8200	E	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 8250	E	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
AKS 32	A	-1,00 - 50,00 bar	-14,50 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	-1,00 - 34,00 bar	-14,50 - 493,13 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	0,00 - 50,00 bar	0,00 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 33	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 1008	A	0,00 - 48,26 bar	0,00 - 700,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 2050	A	-1,00 - 159,00 bar	-14,50 - 2.308,10 psi	-40 - 85 °C	-40 - 185 °F
AKS 3000	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
AKS 3050	A	-1,00 - 25,00 bar	-14,50 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
EMP 2	B	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 100 °C	-40 - 212 °F

0 F 1 8 4 7 7 . 5 2



Inspection and Technical Services Manitoba
500 - 401 York Avenue
Winnipeg Manitoba R3C 0P8
T (204) 945-3373
F (204) 948-2309
www.firecomm.gov.mb.ca/codes_steam_pressure.html

September 7, 2016

TSSA
345 Carlingview Drive
Toronto, ON
M9W 6N9

Attn: Tanya Francis

REGISTRATION OF VALVES AND FITTINGS

Manufacturer: Danfoss A/S

The design(s) for the following Valves/Fittings has been received by us and has been examined and accepted for registration in the Province of Manitoba as follows.

DRAWING / CATALOGUE	CRN	FILE
PRESSURE TRANSMITTER: MBS, AKS, EMP	0F18477.54	36734

An invoice covering survey and registration fees is enclosed.

NOTE:

- *CRN registered under reciprocal agreement & is conditional based on compliance with the notes set by the original issuing Jurisdiction: TSSA.*
- *See attached stamped "this is part of CRN" for scope of registration.*
- *This registration expires May 19, 2026.*

This registration is valid until the indicated expiry date only if the Manufacturer maintains a valid quality management system approved by an acceptable third-party agency until that date. Should the approval of the quality management system lapse before the expiry date indicated above, this registration shall become void.

The registration of this design does not relieve the manufacturer, the owner or his agent of the responsibility for the design or construction of a fitting in accordance with the applicable Acts, Codes and Standards. Inspection and Technical Services assumes no responsibility by registering designs, examining plans and/or inspecting equipment or facility.

Yours truly,

Rabie Harb, E.I.T.
Design Surveyor
Office of the Fire Commissioner
Inspection and Technical Services Manitoba
508 - 401 York Avenue
Winnipeg, Manitoba, R3C 0P8
Phone: 204-945-3373
Email: rabie.harb@gov.mb.ca

for



TECHNICAL STANDARDS &
SAFETY AUTHORITY
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings

I, Christian Dall Larsen, Director, Product Management & Tech. Support
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Danfoss A/S
(Name of Manufacturer)

Located at Nordborgvej 81, DK 6430 Nordborg +45 74882086 +45 74884318
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the *Technical Standards and Safety Act*, Boilers and Pressure Vessels Regulation, comply with all of the requirements of

(Title of recognized North American Standard)
which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with EN 13445 ANSI B16.34 as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001 ISO/TS 16949 which has been verified by the following authority, BUREAU VERITAS

The items covered by this declaration, for which I seek registration, are category Type F type fittings. In support of this application, the following information and/or test data are attached as follows:
Documents and pressure test report for pressure transmitter Type: MBS, AKS, EMP
(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____

X the 3 day of December AD 20 15.

Commissioner for Oaths:

(Printed name)

(Signature)

X
(Signature of Declarer)

FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the *Technical Standards and Safety Act*, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category "F".

CRN: ~~OF1877.54~~ 2.H OF18477.54
2016-09-22

Registered by: Robie Harb

Dated: 2016/09/07

NOTE: This registration expires on May 19, 2026



CRN: OF18477.54



Scope for CRN registration of Danfoss pressure transmitter.

Date 2016.05.09

Danfoss A/S at the division Industrial Automation Nordborg Denmark are producing pressure transmitter mainly for refrigeration applications.

This application covers all the products in the type designations:

- MBS
- AKS
- EMP

The principal design for all types are a metal housing made of stainless steel and a pressure sensor made of stainless steel housing containing a stainless steel diaphragm and piezo electrical measuring device.

The differences of the types are mainly in the design of the housings, mainly 5 types and then the different ratings of the specific types.

An overview of the types is shown on the Application drawing 060R3155.

To verify the strength of the complete production range of each type the pressure tests are performed on samples with the highest rated design pressure.

Scope for this new application is the registration of the following pressure transmitters:

Type:	Temperature range	MAWP (bar)
MBS	-40° - +125°C (-40° - +257°F)	0 – 600 bar (0 - 8700 psi)
AKS	-40° - +85°C (-40° - +185°F)	0 – 160 bar (0 – 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 – 250 bar (0 – 3625 psi)

And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant


Eigil Hansen



R.H.
2016-09-22
CRN: ØF 18477.54



To:	TSSA	From:	Janet Townsend
Company:	Danfoss AS	Phone:	416-747-4291
Pages:	12	Location:	Toronto
Our File:	ANR-4143	Date:	September 1, 2016

Your File: 1886370

Subject: Request for Design Registration

Dear Ms. Francis,

CSA has reviewed the documentation submitted by TSSA on behalf of Danfoss AS. These fittings have been registered by CSA for the Province of Québec. In accordance with an agreement between CSA, the Provinces of Québec and Saskatchewan; this registration is recognized by Quebec and Saskatchewan. These fittings are acceptable for use in these Provinces.

The letters CSA will be applied as a prefix to the CRN indicate which fittings have been registered in this manner. A copy of the stamped Statutory Declaration is attached.

The CRN is CSA-0F18477.56.

The cost for this service is \$ 850.00 plus HST.

A copy of the Statutory Declaration with an original stamp affixed will be forwarded to you along with our invoice by regular mail.

Yours truly

A handwritten signature in blue ink that reads 'Janet Townsend'.

Janet Townsend
Account Manager
CSA Group
janet.townsend@csagroup.org
www.csagroup.org



TECHNICAL STANDARDS &
SAFETY AUTHORITY
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, Ontario
Canada M8X 2X4

Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below



STATUTORY DECLARATION Registration of Fittings

I, Christian Dall Larsen, Director, Product Management & Tech. Support
(Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Danfoss A/S
(Name of Manufacturer)

Located at Nordborgvej 81, DK 6430 Nordborg +45 74882086 +45 74884318
(Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the *Technical Standards and Safety Act*, Boilers and Pressure Vessels Regulation, comply with all of the requirements of _____
(Title of recognized North American Standard)
which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with EN 13445 ANSI B16.34 as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO 9001 ISO/TS 16949 which has been verified by the following authority, BUREAU VERITAS.

The items covered by this declaration, for which I seek registration, are category Type F type fittings. In support of this application, the following information and/or test data are attached as follows:

Documents and pressure test report for pressure transmitter Type: MBS, AKS, EMP
(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____
the 3 day of December AD 2015.

Commissioner for Oaths:
(Back)
(Printed name)

(Signature) x [Signature]
(Signature of Declarer)

FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the *Technical Standards and Safety Act*, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category F

CRN: CSA-OF18477.56
Registered by: A. BANWATT
Dated: AUGUST . 09 . 2016

NOTE: This registration expires on MAY 19 2026



REGISTERED
C.R.N. CSA-OF18477.56
Signed: [Signature]
Date: 09 August 2016
178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3



Danfoss



1 OF 2

Scope for CRN registration of Danfoss pressure transmitter.

ATTACHMENT TO

C.R.N.: CSA-0F18477.56

Date 2016.05.09

Signed: *abswat*
178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

Danfoss A/S at the division Industrial Automation Nordborg Denmark are producing pressure transmitter mainly for refrigeration applications.

This application covers all the products in the type designations:

- MBS
- AKS
- EMP

The principal design for all types are a metal housing made of stainless steel and a pressure sensor made of stainless steel housing containing a stainless steel diaphragm and piezo electrical measuring device.

The differences of the types are mainly in the design of the housings, mainly 5 types and then the different ratings of the specific types.

An overview of the types is shown on the Application drawing 060R3155.

To verify the strength of the complete production range of each type the pressure tests are performed on samples with the highest rated design pressure.

Scope for this new application is the registration of the following pressure transmitters:

Type:	Temperature range	MAWP (bar)
MBS	-40° - +125°C (-40° - +257°F)	0 - 600 bar (0 - 8700 psi)
AKS	-40° - +85°C (-40° - +185°F)	0 - 160 bar (0 - 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 - 250 bar (0 - 3625 psi)

And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant

Eigil Hansen
Eigil Hansen

THIS IS PART OF
CRN 0F18477.5
Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

2.G. 5/19/2016

Type	ID-Type	Pressure range [bar] MIN / MAWP	Pressure range (psi) MIN / MAWP	Ambient temperature range [°C] TS MIN / TS Maks	Ambient temperature range [°F] TS MIN / TS MAKS
MBS 32	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 33	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 32R	A	0,00 - 5,00 bar	0,00 - 72,52 psi	-40 - 85 °C	-40 - 185 °F
MBS 33M	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2000	A	-1,00 - 3,00 bar	-14,50 - 43,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 2100	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2150	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2200	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-20 - 125 °C	-4 - 257 °F
MBS 2250	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-20 - 125 °C	-4 - 257 °F
MBS 3000	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 3053	A	0,00 - 6,00 bar	0,00 - 87,02 psi	-40 - 85 °C	-40 - 185 °F
MBS 3100	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3150	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3153	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 3200	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 125 °C	-40 - 257 °F
MBS 3250	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 3300	C	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 3350	C	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
MBS 4050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 4201	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
MBS 4251	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 4500	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
MBS 4550	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 85 °C	-40 - 185 °F
MBS 4701	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
MBS 4751	A	0,00 - 500,00 bar	0,00 - 7.251,89 psi	-40 - 85 °C	-40 - 185 °F
MBS 5150	D	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 5153	D	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 8200	E	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 8250	E	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
AKS 32	A	-1,00 - 50,00 bar	-14,50 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	-1,00 - 34,00 bar	-14,50 - 493,13 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	0,00 - 50,00 bar	0,00 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 33	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 1008	A	0,00 - 48,26 bar	0,00 - 700,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 2050	A	-1,00 - 159,00 bar	-14,50 - 2.306,10 psi	-40 - 85 °C	-40 - 185 °F
AKS 3000	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
AKS 3050	A	-1,00 - 25,00 bar	-14,50 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
EMP 2	B	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 100 °C	-40 - 212 °F

2 OF 2

 CSA Group

ATTACHMENT TO
C.R.N. CSA-0F18477.56

Signed: *[Signature]*

178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

THIS IS PART OF
 CRN OF 18477.5

Technical Standards & Safety Authority
 Boilers & Pressure Vessels
 Safety Program

2.6. 5/19/16



Technical Safety Authority of Saskatchewan

330 - 1855 Victoria Avenue
Regina, SK S4P 3T2
PH: (306)798-7112 Toll Free: (866)530-8599
FAX: (306)787-9273 Toll Free: (866)760-9255
Email: bollepermits@tsask.ca
Website: www.tsask.ca

Statutory Declaration (Registration of Filings)

TSK-1008

I. Declaration Information

I, Christian Dall Larsen
Director Product Management & Techn. Support
(company title, e.g. vice president, plant manager, chief engineer)
(must be in a position of authority in the manufacturing plant where the fitting is produced)
of: Danfoss A/S Nordborg
(name of manufacturer)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.

located at: Nordborgvej 81, Nordborg Denmark DK 6430
(Plant Address - Apt/Street) (City, Prov) (Postal Code)

do solemnly declare that the fittings listed hereinafter, which are subject to the *Saskatchewan Boiler and Pressure Vessel Safety Act* (check one)

- Comply with the requirements of _____ which specifies the dimensions, Materials of construction, pressure / temperature ratings and identification marking of the fittings, or
- Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with ANSI 16.34 and EN 13445 as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, Bureau Veritas as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are Refrigeration valves

In support of this application, the following information, calculations and / or test data are attached:

.Documents for pressure transmitter Type: MBS, AKS, EMP

II. Declaration

DECLARED before me at _____ in the _____ of _____
this 3 day of December,
Christian Dall Larsen (print name) (13000) (Signature)
(Signature of Commissioner of Oaths)

III. Office Use Only

To the best of my knowledge and belief, the application meets the requirements of the *Boiler and Pressure Vessel Safety Act* and *CSA B51, Clause 4.2*, and is accepted for registration in Category F
CSA-OF18477.56 (Registration Number) AUGUST 09 2016 (Date Registered - MM DD YYYY) MAY 19 2020 (Expiry Date - MM DD YYYY)
(For the Administrator / Chief Inspector)



REGISTERED
C.R.N. CSA-OF18477.56
Signed: [Signature]
Date: 09 August 2016
178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3



1 OF 2

Scope for CRN registration of Danfoss pressure transmitter.

ATTACHMENT TO

Date 2016.05.09

C.R.N. CSA-0F18477.56

Signed:

178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

Danfoss A/S at the division Industrial Automation Nordborg Denmark are producing pressure transmitter mainly for refrigeration applications.

This application covers all the products in the type designations:

- MBS
- AKS
- EMP

The principal design for all types are a metal housing made of stainless steel and a pressure sensor made of stainless steel housing containing a stainless steel diaphragm and piezo electrical measuring device.

The differences of the types are mainly in the design of the housings, mainly 5 types and then the different ratings of the specific types.

An overview of the types is shown on the Application drawing 060R3155.

To verify the strength of the complete production range of each type the pressure tests are performed on samples with the highest rated design pressure.

Scope for this new application is the registration of the following pressure transmitters:

Type:	Temperature range	MAWP (bar)
MBS	-40° - +125°C (-40° - +257°F)	0 – 600 bar (0 - 8700 psi)
AKS	-40° - +85°C (-40° - +185°F)	0 – 160 bar (0 – 2320 psi)
EMP	-40° - +100°C (-40° - +212°F)	0 – 250 bar (0 – 3625 psi)

And we want to apply for a Canadian national registration in all provinces and territories.

Danfoss A/S
Senior approval consultant

Eigil Hansen

THIS IS PART OF
CRN 0F18477.5

Technical Standards & Safety Authority
Boilers & Pressure Vessels
Safety Program

2.6. 5/19/2016

Type	ID-Type	Pressure range [bar] MIN / MAWP	Pressure range (psi) MIN / MAWP	Ambient temperature range [°C] TS MIN / TS Maks	Ambient temperature range [°F] TS MIN / TS MAKS
MBS 32	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 33	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 32R	A	0,00 - 5,00 bar	0,00 - 72,52 psi	-40 - 85 °C	-40 - 185 °F
MBS 33M	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2000	A	-1,00 - 3,00 bar	-14,50 - 43,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 2050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 2100	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2150	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 2200	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-20 - 125 °C	-4 - 257 °F
MBS 2250	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-20 - 125 °C	-4 - 257 °F
MBS 3000	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 3053	A	0,00 - 6,00 bar	0,00 - 87,02 psi	-40 - 85 °C	-40 - 185 °F
MBS 3100	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3150	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 3153	A	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 3200	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 125 °C	-40 - 257 °F
MBS 3250	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 3300	C	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 125 °C	-40 - 257 °F
MBS 3350	C	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
MBS 4050	A	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 85 °C	-40 - 185 °F
MBS 4201	A	0,00 - 25,00 bar	0,00 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
MBS 4251	A	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 4500	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
MBS 4550	A	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 85 °C	-40 - 185 °F
MBS 4701	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
MBS 4751	A	0,00 - 500,00 bar	0,00 - 7.251,89 psi	-40 - 85 °C	-40 - 185 °F
MBS 5150	D	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 85 °C	-40 - 185 °F
MBS 5153	D	0,00 - 40,00 bar	0,00 - 580,15 psi	-40 - 85 °C	-40 - 185 °F
MBS 8200	E	0,00 - 400,00 bar	0,00 - 5.801,51 psi	-40 - 125 °C	-40 - 257 °F
MBS 8250	E	0,00 - 600,00 bar	0,00 - 8.702,26 psi	-40 - 125 °C	-40 - 257 °F
AKS 32	A	-1,00 - 50,00 bar	-14,50 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	-1,00 - 34,00 bar	-14,50 - 493,13 psi	-40 - 85 °C	-40 - 185 °F
AKS 32R	A	0,00 - 50,00 bar	0,00 - 725,19 psi	-40 - 85 °C	-40 - 185 °F
AKS 33	A	0,00 - 68,95 bar	0,00 - 1.000,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 1008	A	0,00 - 48,26 bar	0,00 - 700,00 psi	-40 - 85 °C	-40 - 185 °F
AKS 2050	A	-1,00 - 159,00 bar	-14,50 - 2.306,10 psi	-40 - 85 °C	-40 - 185 °F
AKS 3000	A	0,00 - 60,00 bar	0,00 - 870,23 psi	-40 - 85 °C	-40 - 185 °F
AKS 3050	A	-1,00 - 25,00 bar	-14,50 - 362,59 psi	-40 - 85 °C	-40 - 185 °F
EMP 2	B	0,00 - 250,00 bar	0,00 - 3.625,94 psi	-40 - 100 °C	-40 - 212 °F

 **CSA Group** 20F2

ATTACHMENT TO
C.R.N. CSA-0F18477.56
Signed: [Signature]
 178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3

THIS IS PART OF
 CRN OF 18477.5
 Technical Standards & Safety Authority
 Boilers & Pressure Vessels
 Safety Program

2.6. 5/19/16

Date: [Signature]
 178 Rexdale Boulevard, Toronto, ON Canada M9W 1R3



Saskatchewan
Municipal
Government

Saskatchewan

Procedural Services
330 - 1855 Victoria Avenue
Regina, Saskatchewan
S4P 3V7

787-4509

April 23, 1998

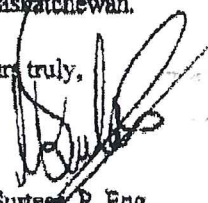
Re: Fittings Registration

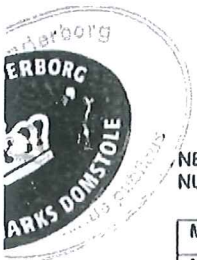
The Province of Saskatchewan will be participating with Quebec, Manitoba and the Canadian Standards Association (CSA) in a pilot project for the registration of fittings. We will recognize registrations done by CSA and accept such fittings for use in Saskatchewan.

The letters CSA will be applied as a prefix to the CRN to indicate which fittings have been registered in this manner. I would appreciate if you could inform your clients of this additional marking requirement.

You may also inform your clients that fittings registered by CSA are accepted for use in Saskatchewan.

Yours truly,


N. Surtees, P. Eng.
Executive Director



UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK
NUNAVUT

NOVA SCOTIA
YUKON

PRINCE EDWARD ISLAND
NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY	
<p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers</p> <p>B Flanges: all flanges</p> <p>C Valves: all line valves</p> <p>D Expansion joints, flexible connections, and hose assemblies: all types</p> <p>E Strainers, filters, separators, and steam traps</p> <p><input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters</p> <p>G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs</p> <p>H Pressure retaining components that do not fall into one of the above categories</p> <p>N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)</p>	TITLE OF THE STANDARD OF CONSTRUCTION <u>ANSI 16.34</u> <u>EN 13445</u>
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
TYPE OF CONSTRUCTION	
FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:	
Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer: [Signature]
Declared before me at _____
X This 3 day of December AD 2015
Commissioner of Oaths
or Notary Public: (sign) _____

USE THIS SPACE FOR THE
OFFICIAL SEAL OF THE
**Province of
New Brunswick**
DEPT OF PUBLIC SAFETY
BOILER & PRESSURE VESSEL ACT

This space for Regulatory Authority use
This registration must be revalidated after ten (10) years from the date of registration


CRN: <u>0F18477.5</u>	REGISTRATION ONLY CRN <u>0F18477.57</u>
FID#: <u>1348</u>	EXAMINER: <u>[Signature]</u> for CHIEF BOILER INSPECTOR
Notes: 1. All fittings shall be registered in the name of the Manufacturer. 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product. 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.	DATE: <u>6/24/2016</u> <input type="checkbox"/> BFRs <input type="checkbox"/> PVs

540393 01 0000 0000
BOILER & PRESSURE VESSEL ACT COMPONENTS




UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK NOVA SCOTIA PRINCE EDWARD ISLAND NEWFOUNDLAND AND LABRADOR
 NUNAVUT YUKON NORTHWEST TERRITORIES

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY	
<input type="checkbox"/> A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers <input type="checkbox"/> B Flanges: all flanges <input type="checkbox"/> C Valves: all line valves <input type="checkbox"/> D Expansion joints, flexible connections, and hose assemblies: all types <input type="checkbox"/> E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters <input type="checkbox"/> G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fuel gas plugs <input type="checkbox"/> H Pressure retaining components that do not fall into one of the above categories <input type="checkbox"/> N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting ASME or ASME requirements)	TITLE OF THE STANDARD OF CONSTRUCTION <u>ANSI 16.34</u> <u>EN 13445</u>
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT 	TYPE OF CONSTRUCTION <input type="checkbox"/> FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: <u>Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP</u>	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer: 

Declared before me at _____

X This 3 day of December AD 2015

Commissioner of Oaths or Notary Public: (sign) _____

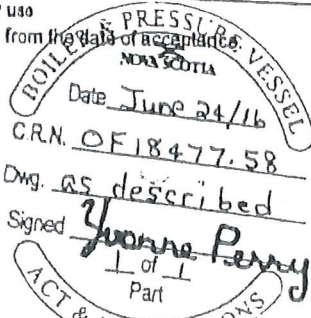
USE THIS SPACE FOR THE OFFICIAL SEAL

(Affix Official seal to the right)

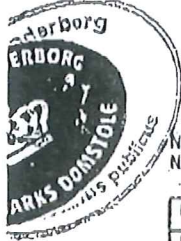
This space for Regulatory Authority use
 This registration must be revalidated after ten (10) years from the date of acceptance

CRN: 0F18477.5
 FID#: 1348

Notes:
 1. All fittings shall be registered in the name of the Manufacturer.
 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.
 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.



Grounds, 540893-01-0000,0011 03.12.2015 R2
 60200-00900/2015 300,011



UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK NUNAVUT NOVA SCOTIA YUKON PRINCE EDWARD ISLAND NORTHWEST TERRITORIES NEWFOUNDLAND AND LABRADOR

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY	
<input type="checkbox"/> A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers <input type="checkbox"/> B Flanges: all flanges <input type="checkbox"/> C Valves: all line valves <input type="checkbox"/> D Expansion joints, flexible connections, and hose assemblies: all types <input type="checkbox"/> E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters <input type="checkbox"/> G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs <input type="checkbox"/> H Pressure retaining components that do not fall into one of the above categories <input type="checkbox"/> N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)	TITLE OF THE STANDARD OF CONSTRUCTION <u>ANSI 16.34</u> <u>EN 13445</u>
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
TYPE OF CONSTRUCTION FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: <u>Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP</u>	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer: [Signature]

Declared before me at _____

X This 3 day of December AD 2015

Commissioner of Oaths or Notary Public: (sign) _____

(Affix Official seal to the right)

USE THIS SPACE FOR THE OFFICIAL SEAL

This space for Regulatory Authority use
This registration must be revalidated after ten (10) years from the date of acceptance.

CRN: OF18477.5

FIG#: 1348

Notes:
1. All fittings shall be registered in the name of the Manufacturer.
2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.
4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.

ACCEPTED
PROVINCE OF PRINCE EDWARD ISLAND
COMMUNITIES, LAND & ENVIRONMENT
 C.R.N. OF18477.59
 DATE JUN 24/16

INSPECTION SERVICES SECTION
BOILER/PRESSURE VESSEL BRANCH
 Ground's. 540893 01 0000.0011
 60309-00900/2013

03.12.2015 R6
300700 Y



UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK
NUNAVUT

NOVA SCOTIA
YUKON

PRINCE EDWARD ISLAND
NORTH-WEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
<p align="center">CATEGORY OF FITTINGS TO BE REGISTERED, CIRCLE ONE CATEGORY ONLY</p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all flna valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/>, (Meeting AECB or ASME requirements)</p>	<p align="center">TITLE OF THE STANDARD OF CONSTRUCTION</p> <p align="center">ANSI 16.34 EN 13445</p>
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
<p align="right">TYPE OF CONSTRUCTION</p> FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
<p>LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:</p> <p align="center">Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP</p>	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg, and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer:
 Declared before me at _____
 X This 3 day of December AD 2015
 Commissioner of Oaths
 or Notary Public: (sign) _____

USE THIS SPACE FOR THE
OFFICIAL SEAL

(Affix Official seal to the right)

<p>This space for Regulatory Authority use</p> <p>This registration must be revalidated after ten (10) years from the date of acceptance.</p>	
CRN: <u>0F18477.5</u> FID#: <u>1348</u>	<p align="center">Newfoundland Labrador Service Unit</p> <p align="center">Registered <u>0F18477.50</u> Date <u>16/06/2015</u> Engineering and Inspection Services Registered by <u></u></p> <p align="center">UNDER THE AUTHORITY OF THE PUBLIC SAFETY ACT AND THE SOLID ROCKET AND VESSEL ACT Grounds: 540075 P.O. Box 3500 St. John's NL A1B 6X9 80200-0000/7 2015 300-0000</p>
<p>Notes:</p> <ol style="list-style-type: none"> All fittings shall be registered in the name of the Manufacturer. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. The declaration shall be made by the person having full authority and responsibility for the quality of the end product. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years. 	



UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK
NUNAVUT

NOVA SCOTIA
YUKON

PRINCE EDWARD ISLAND
NORTHWEST TERRITORIES

NEWFOUNDLAND AND LABRADOR

MANUFACTURERS NAME: Danfoss A/S	
MANUFACTURERS ADDRESS: Nordborgvej 81, DK 6430 Nordborg	
PLANT LOCATIONS: Nordborgvej 81, DK 6430 Nordborg	
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY	
<p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers</p> <p>B Flanges: all flanges</p> <p>C Valves: all line valves</p> <p>D Expansion joints, flexible connections, and hose assemblies: all types</p> <p>E Strainers, filters, separators, and steam traps</p> <p><input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters</p> <p>G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs</p> <p>H Pressure retaining components that do not fall into one of the above categories</p> <p>N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)</p>	TITLE OF THE STANDARD OF CONSTRUCTION ANSI 16.34 EN 13445
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
TYPE OF CONSTRUCTION FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:	
Documents and pressure test report for Pressure transmitter Type: MBS, AKS, BMP	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer:

Declared before me at _____

X This 3 day of December AD 2015

Commissioner of Oaths
or Notary Public: (sign) _____

(Affix Official seal to the right)

USE THIS SPACE FOR THE
OFFICIAL SEAL

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This registration must be revalidated after ten (10) years from the date of acceptance.

CRN: OF18477.5

FID#: 1348


Notes:
1. All fittings shall be registered in the name of the Manufacturer.
2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation.
3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product.
4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.

Government of Nunavut
 867-900-0000/2015
 08.12.2015
 300119




UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK NOVA SCOTIA PRINCE EDWARD ISLAND NEWFOUNDLAND AND LABRADOR
 NUNAVUT YUKON NORTHWEST TERRITORIES

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
<p align="center">CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY</p> <p>A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fuel gas plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)</p>	
TITLE OF THE STANDARD OF CONSTRUCTION ANSI 16.34 EN 13445	
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT 	
TYPE OF CONSTRUCTION FORCED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED: Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP	

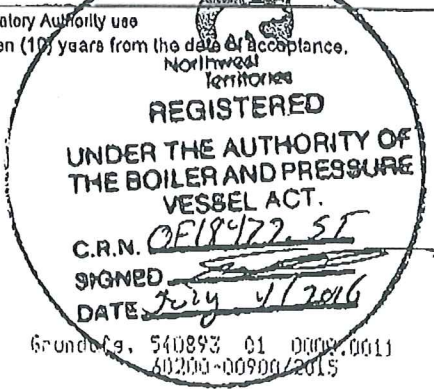
DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer: 
 Declared before me at _____
 X This 3 day of December AD 2015
 Commissioner of Oaths
 or Notary Public: (sign) _____

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OFFICIAL SEAL

(Affix Official seal to the right)

<p align="center">This space for Regulatory Authority use This registration must be revalidated after ten (10) years from the date of acceptance.</p> <p>CRN: <u>OF18477.5</u> FID#: <u>1348</u></p> <p>Notes: 1. All fittings shall be registered in the name of the Manufacturer. 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product. 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.</p>	 <p align="center">REGISTERED UNDER THE AUTHORITY OF THE BOILER AND PRESSURE VESSEL ACT. C.R.N. <u>OF18477.5</u> SIGNED <u>[Signature]</u> DATE <u>July 4/2016</u></p> <p align="right">963.00</p>
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Grounds, 540893 01 0000,0011 03.12.2015 R4
 60200-00900/2015 300700 Y



UNIFORM STATUTORY DECLARATION FORM FOR THE REGISTRATION OF FITTING DESIGNS

NEW BRUNSWICK NOVA SCOTIA PRINCE EDWARD ISLAND NEWFOUNDLAND AND LABRADOR
 NUNAVUT YUKON NORTHWEST TERRITORIES

MANUFACTURERS NAME: <u>Danfoss A/S</u>	
MANUFACTURERS ADDRESS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
PLANT LOCATIONS: <u>Nordborgvej 81, DK 6430 Nordborg</u>	
CATEGORY OF FITTINGS TO BE REGISTERED. CIRCLE ONE CATEGORY ONLY	
A Pipe fittings, including couplings, tees, elbows, Ys, plugs, unions, pipe caps, or reducers B Flanges: all flanges C Valves: all line valves D Expansion joints, flexible connections, and hose assemblies: all types E Strainers, filters, separators, and steam traps <input checked="" type="checkbox"/> F Measuring devices, including pressure gauges, level gauges, sight glasses, levels, or pressure transmitters G Certified capacity-rated pressure relief devices acceptable as primary over pressure protection on boilers, pressure vessels, piping and fusible plugs H Pressure retaining components that do not fall into one of the above categories N Nuclear components: Class 1 <input type="checkbox"/> Class 2 <input type="checkbox"/> Class 3 <input type="checkbox"/> (Meeting AECB or ASME requirements)	TITLE OF THE STANDARD OF CONSTRUCTION ANSI 16.34 EN 13445
SHOW MANUFACTURERS NAME, TRADEMARK, OR LOGO AS IT WILL APPEAR ON THE PRODUCT	
<i>Danfoss</i>	
TYPE OF CONSTRUCTION	
FORGED <input type="checkbox"/> WELDED <input type="checkbox"/> WROUGHT <input type="checkbox"/> CAST <input type="checkbox"/> OTHER <input type="checkbox"/> DESCRIBE OTHER:	
LIST OF SUPPORTING DOCUMENTATION AND IDENTIFICATION OF THE ACTUAL ITEMS TO BE REGISTERED:	
Documents and pressure test report for Pressure transmitter Type: MBS, AKS, EMP	

DECLARATION:

I, Christian Dall Larsen (see note 3) employed by Danfoss A/S Nordborg, and being the person having full authority and responsibility for the quality of the end product do solemnly declare that the information contained in this form is true and to the best of my knowledge represents the product for which registration is sought. The dimensions, materials of construction, pressure temperature ratings, and identification markings are in accordance with the herein named standards. I further declare that the manufacture of these fittings is regulated by a Quality Control Program which extends to each plant where fabrication occurs in whole or in part and has been verified by BUREAU VERITAS as being suitable for that purpose and I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath.

X Signature of Declarer: *Christian Dall Larsen*
 Declared before me at _____
 X This 3 day of December AD 2015
 Commissioner of Oaths
 or Notary Public: (sign) _____

USE THIS SPACE FOR THE
OFFICIAL SEAL

(Affix Official seal to the right) This registration must be revalidated after ten (10) years from the date of acceptance. CRN: <u>OF18477.5</u> FID#: <u>1348</u> Notes: 1. All fittings shall be registered in the name of the Manufacturer. 2. Each category shall be supported with two Statutory Declaration forms and one copy of supporting documentation. 3. The declaration shall be made by the person having full authority and responsibility for the quality of the end product. 4. Quality control programs shall be resubmitted for validation at a maximum interval of five (5) years.	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> NUNAVUT </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> REGISTERED </div> CRN <u>OF18477.5N</u> Date <u>June 27, 2016</u> Signed <u><i>Chief Inspector</i></u> Chief Inspector
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