



Montréal, 7 Février 2020

MME TANYA FRANCIS
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO,
CANADA M9W6N9

Fabricant : CIRCOR AEROSPACE INC.
2301 WARDLOW CIRCLE
CORONA CALIFORNIA
USA 92880

Numéro de dossier : 951620

Numéro(s) de dessin (s) : ASME SAFETY RELIEF VALVES D500 & M5100 SERIES, NB-18
CERT.NO.:10001, 10012, 10023, 10034, 10056, SEE SCOPE OF REGISTRATION ATTACHED

Objet : Enregistrement des plans et devis – Confirmation de l'enregistrement

Madame,

La Régie du bâtiment du Québec (RBQ) vous informe que votre demande d'enregistrements de plans et devis a été traitée et que cette conception a été enregistrée sous le numéro d'enregistrement canadien (NEC\CRN) : 0G22072.56

Nous portons à votre attention cette exigence applicable à la réglementation sur les appareils sous pression et des codes et normes qui y sont associés :

- Le constructeur doit maintenir un système de contrôle de la qualité valide pour fabriquer selon ce NEC.

Le présent avis d'approbation ne dégage pas le constructeur de ses responsabilités quant à la conception ou à la construction des équipements fabriqués selon ce NEC.

Salutations distinguées,

Bureau d'expertise et d'homologation en équipements sous pression

N.B. Translation of this communication below.

Montréal

545, boul. Crémazie Est, 7^e étage
Montréal (Québec) H2M 2V2
Téléphone : 514 873-6459
Sans frais : 1 866 262-2084
www.rbq.gouv.qc.ca



Montréal, February 7, 2020

MME TANYA FRANCIS
TECHNICAL STANDARDS & SAFETY AUTHORITY
345 CARLINGVIEW DRIVE
TORONTO ONTARIO,
CANADA M9W6N9

Manufacturer : CIRCOR AEROSPACE INC.
2301 WARDLOW CIRCLE
CORONA CALIFORNIA
USA 92880

Our reference : 951620

Design number : ASME SAFETY RELIEF VALVES D500 & M5100 SERIES, NB-18 CERT.NO.:10001,
10012, 10023, 10034, 10056, SEE SCOPE OF REGISTRATION ATTACHED

Subject: Registration of designs – Confirmation of approval

Dear Madam,

The Régie du bâtiment du Québec (RBQ) informs you that your application for the registration of designs has been evaluated and that the design was registered under the Canadian Registration Number (CRN\NEC) : 0G22072.56.

We bring your attention this requirement of the regulation respecting pressure vessels, and the codes and standards adopted:

- The manufacturer must maintain a valid quality control program to produce according to the CRN.

This notice of approval does not relieve the constructor of his responsibilities with respect to the design or construction of equipment manufactured according to this CRN.

Yours sincerely,

Bureau d'expertise et d'homologation en équipements sous pression

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Montréal (Québec) H2M 2V2
Téléphone : 514 873-6459
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Statutory Declaration Registration of Fittings

(a) Design Qualification



Circle Seal Controls

I, RANDALL RALEY

(Name of applicant)

PRODUCT MANAGER

(Position eg, president, plant manager, chief eng.)

of CIRCOR AEROSPACE, INC.

(name of company)

Located at 2301 WARDLOW CIRCLE, CORONA, CALIFORNIA, 92880, USA

(plant address)

do solemnly declare that the fittings listed hereunder, which are subject to the Boilers & Pressure Vessels Act:

comply with all the requirements of the ANSI/ASME codes as to their dimensions, material, identification & service for which are required:

Or

are not covered by the provisions of the ANSI/ASME codes, and are therefore constructed to comply with _____ code and standard, and are designed to the best current engineering practice, as shown by the supporting test data.

(b) Quality control of Manufacture

I further declare the manufacture of these fittings is controlled by a quality control program which complies with the requirements of ASME UV _____, and has been verified by the following authority or authorized agency ASME

The fittings² covered by this declaration, for which I seek registration, are CATEGORY G - SAFETY RELIEF VALVES

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

SCOPE OF CRN, DRAWINGS, CALCULATIONS, REPORTS

Declared before me at 

See Attached Notary Acknowledgment Certificate

AV 11/26/19

In the of _____ of _____

The _____ day of _____ AD 2020

A (commissioner for oaths)


 Signature of Declarer

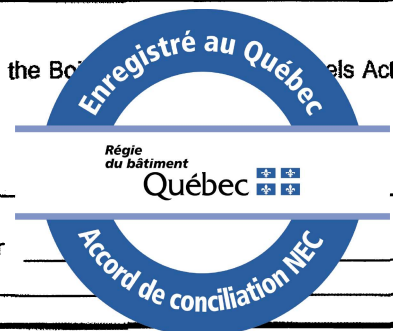
For Official Use Only

The application is accepted for registration in Category _____ in accordance with the Boilers & Pressure Vessels Act and CSA Standard B51.

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

Registered Number CRN 0G22072.56
07 FEV 2020

For the Chief Inspector _____
 Date _____



¹ Three completed copies of Statutory Declaration form together with three copies of Catalogs, drawings of Bulletins illustrating above fittings shall be submitted.
² All fittings are required to be registered in the name of the Manufacturer.
³ This form shall be completed and signed by the president of highest official in the manufacturing plant where the fitting is produced.

CALIFORNIA JURAT CERTIFICATE

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Riverside

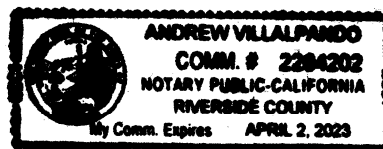
Subscribed and sworn to (or affirmed) before me on this 26 day of November
20 19, by Randall Raley

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

WITNESS MY HAND AND OFFICIAL SEAL.



Signature of Notary Public



(Notary Seal)

OPTIONAL INFORMATION

The jurat contained within this document is in accordance with California law. Any affidavit subscribed and sworn to before a notary shall use the preceding wording or substantially similar wording pursuant to Civil Code sections 1189 and 8202. A jurat certificate cannot be affixed to a document sent by mail or otherwise delivered to a notary public, including electronic means, whereby the signer did not personally appear before the notary public, even if the signer is known by the notary public. The seal and signature cannot be affixed to a document without the correct notarial wording. As an additional option an affiant can produce an affidavit on the same document as the notarial certificate wording to eliminate the use of additional documentation.

DESCRIPTION OF ATTACHED DOCUMENT

/

(Title of document)
Number of Pages _____
Document Date _____

(Additional Information)

CAPACITY CLAIMED BY SIGNER

/

Individual

Corporate Officer

Partner

Attorney-In-Fact

Trustee

Other: _____

(AV)

SCOPE OF CRN REGISTRATION

Product Description	Model	Design Code	Code Stamp	Material Specifications	Size Range	End Connection	MAWP at MAWT (Note 1,2,3)	Report Number
ASME Safety Relief Valves	Series D500	ASME Section VIII Division 1	ASME UV	Stainless Steel ASME SA479-316,	1/4"	NPT	150 psig at 400°F	R-1186
ASME Safety Relief Valves	Series D500	ASME Section VIII Division 1	ASME UV	Naval Brass ASTM B21 Alloy 464 (Note 4)	1/4"	NPT	150 psig at 350°F	R-1186
ASME Safety Relief Valves	Series M5100	ASME Section VIII Division 1	ASME UV	Stainless Steel ASME SA479-316,	1/8", 1/4", 3/8", 1/2", 3/4", 1"	NPT	1200 psig at 400°F	R-1186
ASME Safety Relief Valves	Series M5100	ASME Section VIII Division 1	ASME UV	Naval Brass ASTM B21 Alloy 464 (Note 4)	1/8", 1/4", 3/8", 1/2", 3/4", 1"	NPT	1200 psig at 350°F	R-1186

Note 1: MAWP = Maximum Allowable Working Pressure, MAWT = Maximum Allowable Working Temperature.

Note 2: The pressure-temperature ratings shown are the maximum CRN pressure-temperature ratings. In all cases the pressure-temperature ratings may be limited by the seat and seal materials. Please consult Circle Aerospace, Inc.

Note 3: For low temperature operation the products shall conform to the rules of the applicable codes under which they are used.

Note 4: Brass ASTM B21 Alloy 464 may be used under the conditions specified in ASME Code Case 1750-25 as follows:

- A representative finished model of each product size and design having a bonnet, body, or yoke of pressure relief valves, housings for breaking or buckling pin devices, and holders for rupture disks constructed of ASTM B21 Alloy 464 shall be tested to determine the presence of residual stresses that might result in failure of individual parts due to stress corrosion cracking. Tests shall be conducted in accordance with ASTM B154 or ASTM B858M.
- Material conforming to ASTM B21 Alloy 464 shall be used only in the soft and half-hard tempers.

Note 5: See attached copy of National Board Listing.



0G22072.56
07 FEB 2020

Circor Aerospace, Inc. (CSC)

NB#: 10001

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Circor Aerospace, Inc. (CSC)

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Certification Number:	10001	Design Series or catalog number	D-500-2M
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .359 SCFM/PSIA

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.25 NPS		0.059 sq in	0.275 in	0.069 in	15 - 150 psi	Air	VIII

Certification Number:	10012	Design Series or catalog number	M5100-1M
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Phillips Petroleum on November 06, 1966

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .286 SCFM/PSIA

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.125 NPS		0.049 sq in	0.25 in	0.06 in	100 - 1200 psi	Air	VIII

Certification Number:	10023	Design Series or catalog number	M5100-2M & 3M
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: .667 SCFM/PSIA

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.25 - 0.375 NPS		0.1 sq in	0.358 in	0.08 in	15 - 1200 psi	Air	VIII

Circor Aerospace, Inc. (CSC)

NB#: 10034

Location: 2301 Wardlow Circle, Corona, CA 92880 United States

Acceptable Abbrev.: Circle Seal

Certification Number:	10034	Design Series or catalog number	M5100-4M
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 1.310 SCFM/PSIA

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.5 NPS		0.209 sq in	0.516 in	0.1 in	15 - 1200 psi	Air	VIII

Certification Number:	10056	Design Series or catalog number	M5100-6M & 8M 100 - 1200
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Type Classification: Safety Relief Valve

Capacity Tests: Sec. VIII Div. 1 at Phillips Petroleum on November 16, 1966

Method of Establishing Relieving Capacity: Flow Capacity, Slope

Certified Value: 3.453 SCFM/PSIA

Test Medium: Gas

Certified Medium: Air/Gas

Set Pressure Definition: Pop

Blowdown: Fixed

Scope of Nominal Size and Set Pressure Ranges:

Inlet Size	Outlet Size	Flow Area	Orifice [designator] diameter	Lift	Set Pressure Range	Media	Code Section
0.75 - 1 NPS		0.428 sq in	0.738 in	0.25 in	100 - 1200 psi	Air	VIII



OG22072.56
07 FEV 2020