

Factory Mutual Research Corporation
1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

4-20 mA TEMPERATURE TRANSMITTER consisting of the following apparatus, installed in accordance with entity requirements and Certification Drawings 3-7852, 3-7851 and 3-7892. The transmitters were evaluated having the following equipment ratings:

Associated electrical apparatus having intrinsically safe connections for Class I, II and III, Division 1, Group A,B,C,D,E, F and G hazardous (classified) locations.

<u>Apparatus</u>	<u>Model</u>
Temperature Transmitter	Model IPAQ-LX

Electrical apparatus having intrinsically safe connections for Class I, Division 1, Group A, B, C and D hazardous (classified) locations.

<u>Apparatus</u>	<u>Type</u>
Temperature Transmitter	Model IPAQ-HX
Temperature Transmitter	Model APAQ-HX

Manufactured by: INOR PROCESS AB
P.O. BOX 9125
S-200 39 MALMO, SWEDEN

This certifies that the equipment described has been found to comply with the following Factory Mutual Research Corporation Approval Standards:

Approval Standard Class 3600 - 1989
Approval Standard Class 3610 - 1988
Approval Standard Class 3810 - 1989

Approval Job Identification: 0D6A8.AX

Approval Report Dated August 8, 1997

Factory Mutual Research Corporation

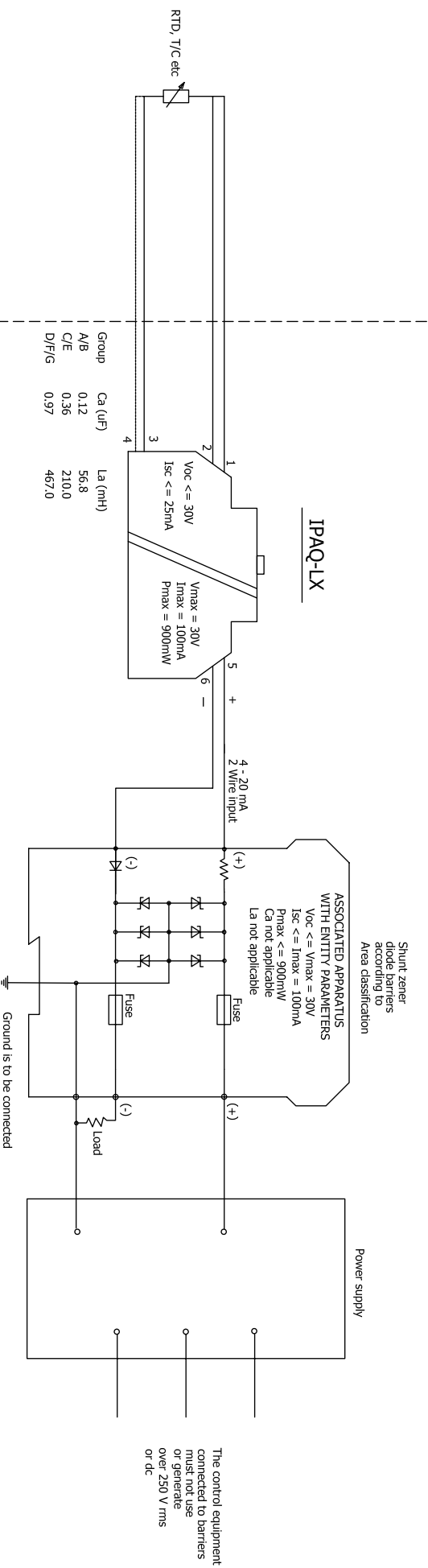
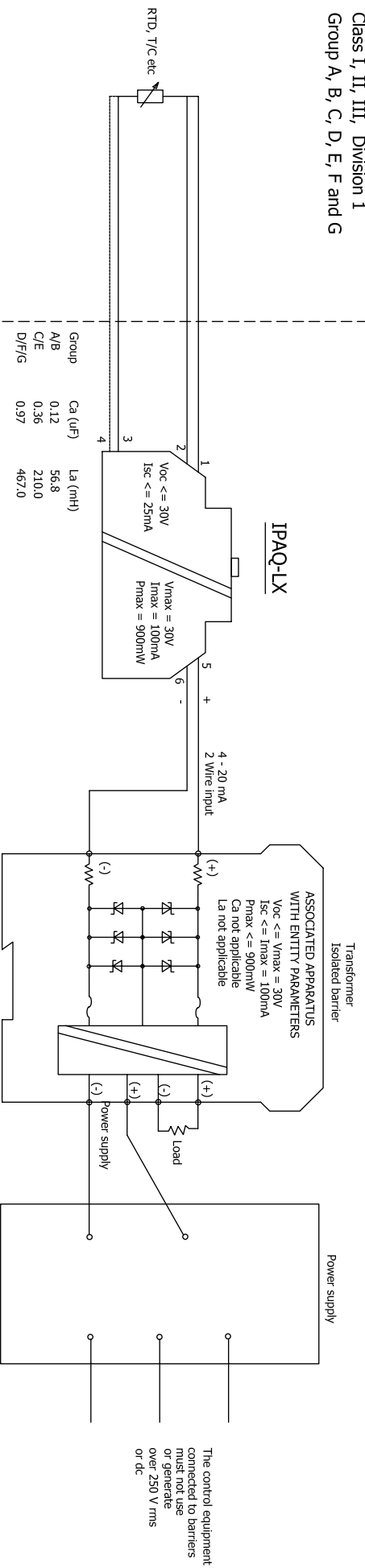


Frank J. McGowan, Manager
Instrumentation Section
Approvals Division

Date: 9/19/97

Hazardous (Classified) Location
Class I, II, III, Division 1
Group A, B, C, D, E, F and G

Nonhazardous Location



Group	C_a (μF)	L_a (mH)
A/B	0.12	56.8
C/E	0.36	210.0
D/F/G	0.97	467.0

- The configuration of the associated apparatus or intrinsically safe equipment shall be FM/CSA approved. Simple apparatus connected to the equipment must follow the requirements of appropriate standards e.g. EN 50020:2002, FM 3610:1999 or IEC 60079-11:1999.
- Safety barriers must be installed in accordance with the manufacturers instructions.
- Installation must be in accordance with the National Electrical Code (NEPA 70, Article 504), Canadian Electrical Code (CEC) Section 18 and ANSI/ISA-ARP12.6.
- If the cable parameters are unknown, the following values shall be used:
Capacitance = 60 pF/feet (200 pF/m)
Inductance = 0.20 μH /feet (0.66 μH /m)
- If the safety barrier requires an earth connection then the resistance between the terminal on the safety barrier and the earth ground shall be less than 1 ohm.
- Do not connect any communication equipment unless area is known to be non-hazardous.

No revision to drawing without prior FMV/CSA approval.

Rev H	060825	CSA added.	GP
Rev G	050928	Standards in note 1 added, changed font	GP
Rev F	970805	Text note 6 is added.	GP
Rev E	970623	IPO-X is removed.	GP
Rev D	970619	Text note 7 added.	GP
Rev C	970617	Added IPO-X.	GP
Rev B	970602	Revision of the text etc.	GP
Rev A	970516	Revision of the text etc.	GP
Revision	Date	Comment	Approved by:

File	mek7852h	Quantity	1	Description	Intrinsic Safety Control Drawing IPAQ-LX TEMPERATURE TRANSMITTER	Material		Drawing no.	3-7852	Article no.	SS-ISO-2768-1 m
Date:	970207	Designed by:	LB	Scale:	GP	No. of sheets:	1	Sheet:	1	General reference:	SS-ISO-2768-1 m
Date:	970207	Approved by:	GP	Scale:	GP	No. of sheets:	1	Sheet:	1	General surface roughness for projection:	Ra 3.2
No revision to drawing without prior FMV/CSA approval.											
The control equipment connected to barriers must not use or generate over 250 V rms or dc.											