

CERTIFICATE OF COMPLIANCE

Certificate Number 2017-6-8-E482453
Report Reference E482453-D1000-1/A0/C0-UL
Issue Date 2017-6-8
Issued to: ARDETEM SFERE
Applicant Company: Parc d'activité d'Arbora N°2, Route de Brindas
69510, Soucieu en Jarrest France
Listed Company: Same as Applicant

This is to certify that representative samples of Process Control devices
TPIV, TPAV, DSv or μ Cv, DASv and TPIV M or μ Cv M (see enclosure misc 01 for details)

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 61010-1, 3rd Edition, May 11, 2012, Revised July 15 2015, CAN/CSA-C22.2 No. 61010-1-12, 3rd Edition, Revision dated July 2015

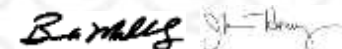
Additional Standards: N/A

Additional Information: See the UL Online Certifications Directory at www.ul.com/database for additional information.

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.



Bruce Mahrenholz, Assistant Chief Engineer, Global Inspection and Field Services, UL LLC
Joseph Hosey, General Manager, Director of Sales – Canada, UNDERWRITERS LABORATORIES OF CANADA INC.

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Miscellaneous - (01) Electrical rating TPIv μ Cv TPIv M μ Cv M 20170606Miscellaneous - (01) Electrical rating TPIv μ Cv TPIv M μ Cv M 20170606**ELECTRICAL RATING****TPIv, TPAv, DSv / μ Cv, DASv and TPIv M / μ Cv M**

Cat. No. ARDETEM	Cat.No. SFERE	Pcb	Supply Voltage	Input (nominal)	Output (nominal)	Relays
TPIv 400	μ Cv 3012	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)
TPIv 401	μ Cv 3011	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)
TPAv 401	μ Cv 305	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	-
TPIv 450	μ Cv 3212	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog outputs (x2): 0-10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)
TPIv 451	μ Cv 3211	CU1	20-250VAC, 50-60 Hz, 20-250VDC 2.8W / 8VA	+/-270VDC, +/-20mA	Analog outputs (x2): 0-10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)
TPIv 10	μ Cv 10	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog outputs (x2): 0-10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)
TPIv 12	μ Cv 12	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Analog outputs (x2): 0-10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load (Option R)

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DSv 10	DASv 10	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load
DSCv 10	DASCv 10	CU1	20-250VAC 50-60 Hz, 20-250VDC, 2.8W / 8VA	+/-270VDC, +/-20mA	Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load
TPIv-SI 40	μ Cv-SI 32	CU2	20-250VAC 50-60 Hz, 20-250VDC, 2.5W / 6VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
TPIv-SI 41	μ Cv-SI 31	CU2	20-250VAC 50-60 Hz, 20-250VDC, 2.5W / 6VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
TPIv-SIN 40	μ Cv-SIN 32	CU2	24Vdc+/- 30%, 3.1A	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
TPIv-SIN 41	μ Cv-SIN 31	CU2	24Vdc+/- 30%, 3.1A	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
DSv-SI P	DASv-SI Plus	CU2	20-250VAC, 50-60 Hz, 20-250VDC, 2.5W / 6VA	+/-270VDC, +/-20mA	Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
DSv-SI O	DASv-SI 100	CU2	20-250VAC, 50-60 Hz, 20-250VDC, 2.5W / 6VA	-	-	5A/250VAC, Resistive Load (Option R)
DSv-SIN P	DASv-SIN Plus	CU2	24Vdc+/- 30%, 3.1A	+/-270VDC, +/-20mA	Sensor power supply: 27-17Vdc, 0- 20mA	5A/250VAC, Resistive Load (Option R)
DSv-SIN O	DASv-SIN 100	CU2	24Vdc+/- 30%, 3.1A	-	-	5A/250VAC, Resistive Load (Option R)

Miscellaneous - (01) Electrical rating TPlv μ Cv TPlv M μ Cv M 20170606

TPlv M	μ Cv M	CU3	24Vdc+/- 30%, 3.1A	24Vdc+/- 30%, 3.0A	RS 485	5A/250VAC Resistive Load
TPlv ME	μ Cv ME	CU3	24Vdc+/- 30%, 3.1A	24Vdc+/- 30%, 3.0A	Ethernet	5A/250VAC Resistive Load
TPlv MP	μ Cv MP	CU3	24Vdc+/- 30%, 3.1A	24Vdc+/- 30%, 3.0A	Profinet	5A/250VAC Resistive Load
TPlv MPB	μ Cv MPB	CU4	24Vdc+/- 30%, 3.1A	24Vdc+/- 30%, 3.0A	Profibus	5A/250VAC Resistive Load
μ Console Tactile	μ Console Tactile	CU5	5VDC, 0.1W	-	-	-
TPAv401AR4, TPlv10 AR4	μ Cv805, μ Cv10 AR4	CU6	20-250VAC 50-60 Hz, 20-250VDC, 2.6W / 8VA	+/-270VDC, +/-20mA	Analog output: 0- 10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load
TPAv401 R4, TPlv10 R4	μ Cv405, μ Cv10 R4	CU6	20-250VAC 50-60 Hz, 20-250VDC, 2.6W / 8VA	+/-270VDC, +/-20mA	Sensor power supply: 24VDC +/- 15%, 25mA max	8A/250VAC, Resistive Load
TPlv4001	μ Cv4001	CU7	20-250VAC 50-60 Hz, 20-250VDC, 2.6W / 8VA	+/-270VDC, +/-20mA	Analog output: (x2), 0-10VDC, 0-20mA, Sensor power supply: 24VDC +/- 15%, 25mA max	0.07A/150VAC, Resistive Load (option R)

PCB internal reference	PCB label
CO142-8	CU1
CO137-SILSI-4	CU2
CO148-OETHE-3	CU3
CO148-CPBUS-2	CU4
19370R11	CU5
CO152-4REL-2	CU6
CO155-RAPI-2	CU7

Miscellaneous - (01) Electrical rating TPIv μ Cv TPIv M μ Cv M 20170606Nomenclature (Example)

TPIv	401	F	SP XXXX	TROPICALISE
I	II	III	IV	V

- I - Designated basic series:
TPIv or μ Cv and DSv or DASv
and TPIv M/ME/MP/MPB or μ Cv M/ME/MP/MPB
- II - Inputs and outputs type:
eg 401 – Universal input with one analog output
- III - Options:
For TPIv or μ Cv:
F – Fast response time
A – Analog output
2A – 2 Analog outputs
R – 2 Relay outputs
R4 – 4 Relay outputs
SI – ATEX input (added in Position I)
SIN- ATEX input with local communication bus (added in Position I)
N – RS485 output
L – SIL function (added in Position I)
C - μ console
- For TPIv M/ME/MP/MPB or μ C M/ME/MP/MPB:
D – Datalogger
E – Emitter
R – Receiver
C – Calcul
Y – Read - write
M – RS485 for TPIv ME
S – 3 Ethernet slots
- IV - Function (Optional):
SP XXXX – Special function Blank –
Standard function
- V - Coating (Optional):
Coat for wet environment