



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS99ATEX2282X

15

Description of Equipment or Protective System

The TDY PC Prog. Temp. Transmitter Model TDY-ISE and SDY PC Prog. Signal Isolator/Converter Model SDY-ISE are designed to convert a measurement signal from either a thermocouple, a mV source, an RTD or a potentiometer into a 4 - 20 mA current signal. The Model SDY-ISE is identical to the Model TDY-ISE with the exception that it can accommodate sensors having a different level of sensitivity.

The apparatus comprises four printed circuit boards, an isolating transformer, an opto-isolator and a liquid crystal display (LCD) unit all housed within a metallic enclosure having a plastic lid. The plastic lid has 2 screw-type terminals for the power supply, 4 screw-type terminals for the sensor connections, a 3-pin connector and also a window to permit viewing of the LCD.

The 3-pin connector is labelled COM and is used exclusively for programming purposes. This connector must only be used in a non-hazardous area.

The 2 power supply terminals are marked +PS and -PS and the 4 sensor terminals are marked 1, 2, 3 and 4.

Input Parameters Terminals +PS and -PS

$U_i = 28V$
 $I_i = 100mA$
 $P_i = 0.66W$
 $C_i = 0.037\mu F$ at 28 volts
 $L_i = 0$

Input Parameters for Connector COM

$U_i = 7.5V$

Output Parameters Terminals 1, 2, 3 and 4

$U_o = 6.51V$
 $I_o = 112mA$
 $P_o = 0.66W$
 $C_i = 20\mu F$
 $L_i = 0$



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS99ATEX2282X

Load Parameters for Terminals 1 to 4.

The load connected to terminals 1, 2, 3 and 4 must not exceed the following values:-

GROUP	CAPACITANCE in μF	INDUCTANCE in mH	OR	L/R RATIO in $\mu\text{H}/\text{ohm}$
IIC	2	2.97		101
IIB	480	12.59		387
IIA	980	25.23		817

16

Report No.

99(C)0335

17

Special Conditions For Safe Use

1. The terminals +PS, -PS, and 1 to 4 are not protected to at least IP20. The apparatus must be housed in an enclosure meeting the requirements of Clauses 7.3.2 and 8.1 of EN 50014: 1997 + Amds 1 & 2 and 6.1 of EN 50020: 1994.
2. Any sensor connected to terminals 1 to 4 must derive its power exclusively from these terminals and must not contain any means of increasing the available voltage or current.

18

Essential Health and Safety Requirements

ESSENTIAL HEALTH & SAFETY REQUIREMENTS not covered by Standards listed at (9)		
Clause	Subject	Compliance
1.1.3	Changes in characteristics of materials and combinations thereof	Report 99(C)0335 Clause 5.1.1.3
1.2.2	Components for incorporation or replacement	Report 99(C)0335 Clause 5.1.2.2
1.2.5	Additional means of protection	Report 99(C)0335 Clause 5.1.2.5
1.2.7	Protection against other hazards	Report 99(C)0335 Clause 5.1.2.7
1.4.2	Withstanding attack by aggressive substances	Report 99(C)0335 Clause 5.1.4.2

19

DRAWINGS

Number	Issue	Date	Description
205-217-00	B	1/99	General assembly, TDY
235-440-00 Sheet 1 of 4	B	6/99	Circuit diagram, PC1 TDY
235-440-00 Sheet 2 of 4	B	6/99	Circuit diagram, PC2 TDY
235-440-00 Sheet 3 of 4	B	6/99	Circuit diagram, PC3 TDY
235-440-00 Sheet 4 of 4	B	6/99	Circuit diagram, PC4 TDY
235-840-00	C	12 JAN 2000	Parts list, PC1 TDY



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS99ATEX2282X

Number	Issue	Date	Description
235-841-00 Sheets 1 to 3	C1	23 OCT 2000	Parts list, PC2 TDY
235-842-00	B	12 JAN 2000	Parts list, PC3 TDY
235-843-00	B	12 JAN 2000	Parts list, PC4 TDY
235-844-00	B	12 JAN 2000	Parts List, FRT PNL TDY
235-544-00	B	10/99	Assembly, Front panel TDY
235-540-00 Sheets 1 and 2	C	10/99	Assembly, PC1 TDY
235-541-00	C	10/99	Assembly, PC2 TDY
235-542-00	B	10/99	Assembly, PC3 TDY
235-543-00	B	10/99	Assembly, PC4 TDY
506-510-01 Sheets 1 and 2	A1	01/00	PCB details, PC1 TDY
506-511-01 Sheets 1 and 2	D	3/00	PCB details, PC2 TDY
506-512-01 Sheets 1 and 2	A2	01/00	PCB details, PC3 TDY
506-513-01 Sheets 1 and 2	A1	01/00	PCB details, PC4 TDY
506-510-02	A	30-MAR-2000	PCB Artwork, PC1 primary side
506-510-02	A	30-MAR-2000	PCB Artwork, PC1 secondary side
506-511-02	D	28-MAR-2000	PCB Artwork, PC2 primary side
506-511-02	D	28-MAR-2000	PCB Artwork, PC2 inner layer 1
506-511-02	C	28-MAR-2000	PCB Artwork, PC2 inner layer 2
506-511-02	D	28-MAR-2000	PCB Artwork, PC2 secondary side
506-512-02	A	30-MAR-2000	PCB Artwork, PC3 primary side
506-512-02	A	30-MAR-2000	PCB Artwork, PC3 secondary side
506-513-02	A	30-MAR-2000	PCB Artwork, PC4 primary side
506-513-02	A	30-MAR-2000	PCB Artwork, PC4 secondary side
802-810-73	B	08/00	Transformer, T201
800-801-01 Sheet 4 of 4	P	11 NOV 98	PCB specifications
205-245-00	A	10.99	General assembly, SDY
235-470-00 Sheet 1 of 4	A	10/99	Circuit diagram, PC1 SDY
235-470-00 Sheet 2 of 4	A	10/99	Circuit diagram, PC2 SDY
235-470-00 Sheet 3 of 4	A	10/99	Circuit diagram, PC3 SDY
235-470-00 Sheet 4 of 4	A	10/99	Circuit diagram, PC4 SDY
235-870-00	A	01 NOV 1999	Parts list, PC1 SDY
235-871-00 Sheets 1 to 3	A	23 OCT 2000	Parts list, PC2 SDY
235-872-00	A	01 NOV 1999	Parts list, PC3 SDY
235-873-00	A	01 NOV 1999	Parts list, PC4 SDY
235-874-00	A	01 NOV 1999	Parts list, FRT PNL SDY
235-574-00	A	10/99	Assembly, Front panel SDY
235-570-00 Sheets 1 and 2	A	10/99	Assembly, PC1 SDY



13

Schedule

14

EC-TYPE EXAMINATION CERTIFICATE N° BAS99ATEX2282X

Number	Issue	Date	Description
235-571-00	A	10/99	Assembly, PC2 SDY
235-572-00	A	10/99	Assembly, PC3 SDY
235-573-00	A	10/99	Assembly, PC4 SDY
200-251-1832	A	08/00	TDY-ISE and SDY-ISE Label details

All the drawings listed above, with the exception of 200-251-1832 are common to Certificate No BAS99ATEX3284X.

This certificate may only be reproduced in its entirety and without any change, schedule included.

BASEEFA List Keywords
2TRANSMI