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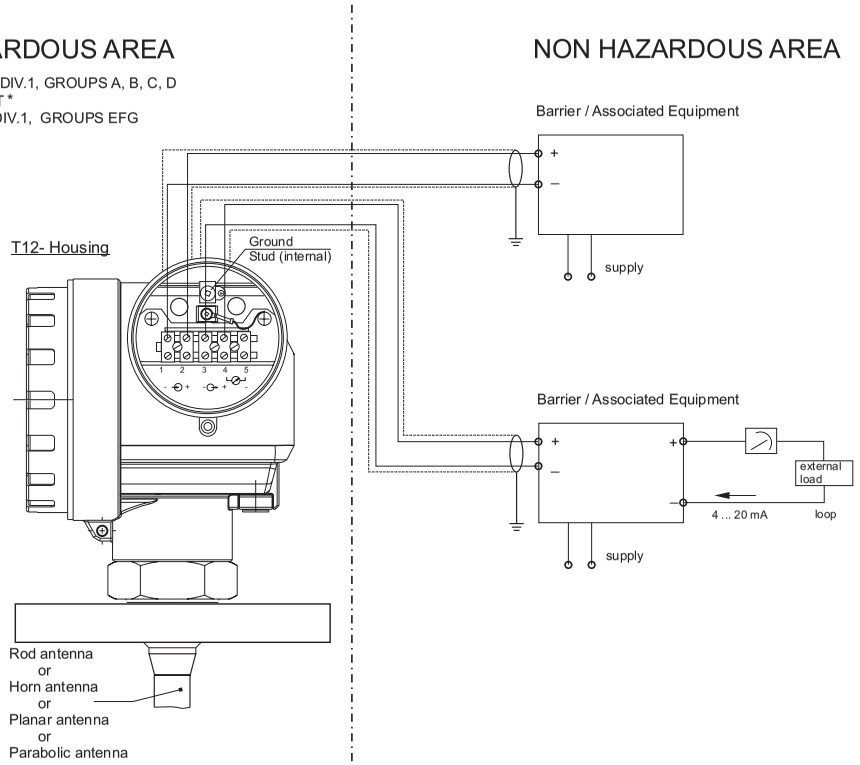
Control drawing
960397-2045 A

Micropilot S FMR 53x

Endress + Hauser
The Power of Know How



Area of application
The compact instruments are suitable for use in areas subject to explosion caused by gases, vapours or mists.
Permissible ambient temperature:
Electronics: intrinsically safe: T12-enclosure: -40 ... +80°C
Antenna: Horn antenna -40°C ... +200°C
High temperature (Horn) antenna -40°C ... +400°C
PTFE rod antenna -40°C ... +150°C
Planar antenna -40°C ... +150°C
Parabolic antenna -40°C ... +200°C
All antennas have a 6P rating.

* Permissible process / ambient temperature and temperature code:

Temperature code Micropilot S **FMR 53x -....** With / without display VU331	Permissible medium temperature (flange)	Permissible ambient temperature electronics compartment				
		FMR 530 -.....	**FMR 530 -.....** High temperature antenna	**FMR 531 -.....**	**FMR 532 -.....**	**FMR 533 -.....**
T6	+ 80 °C	+ 50 °C	+ 50 °C	+ 50 °C	+ 50 °C	+ 50 °C
T6	+ 60°C	+ 55 °C	+ 55 °C	+ 55 °C	+ 55 °C	+55 °C
T5	+ 95 °C	+ 65 °C	+ 70 °C	+ 65 °C	+ 65 °C	+ 65 °C
T5	+ 70 °C	+ 70 °C	+ 75 °C	+ 70 °C	+ 70 °C	+ 70 °C
T4	+ 130 °C	+ 70 °C	+ 75 °C	+ 70 °C	+ 70 °C	+ 70 °C
T4A	+ 80 °C	+ 80°C	+ 80 °C	+ 80 °C	+ 80 °C	+ 80 °C
T3C	+ 150 °C	+ 70 °C	+ 75 °C	+ 70 °C	+ 70 °C	+ 70 °C
T3	+ 195 °C	+ 65 °C	+ 70 °C	---	---	+ 60 °C
T2	+ 295 °C	---	+ 65 °C	---	---	---
T1	+ 350 °C	---	+ 60 °C	---	---	---
T1	+ 400 °C	---	+ 55 °C	---	---	---

Notes: INTRINSICALLY SAFE CLASS I, DIV 1, GROUPS A, B, C, D or Ex ia IIC
HAZARDOUS LOCATION INSTALLATION:

1. Control room equipment may not use or generate over 250 Vrms.
2. Install per the Canadian Electrical Code.
3. WARNING: Substitution of components may impair intrinsic safety.
   Avertissement: La substitution de composants peut compromettre la sécurité intrinsèque.
4. Ex ia IS defined as intrinsically safe
5. For entity installation use CSA certified safety barrier or other associated equipment that satisfy the following conditions: with Uo/Voc ≤ Ui/Vmax, Io/Isc ≤ Ii/Imax,
   Co/Ca ≥ Ci + C cable, Lo/La ≥ Li + L cable.
   Barrier must be incapable of delivering more than 1 Watt to a matched load.

   Transmitter entity parameters are as follows:

Intrinsically safe SUPPLY circuit	
Ui/Vmax	= 30 V
Ii/Imax	= 300 mA
Pi/Pmax	= 1 W
Ci	= 16 nF
Li	= 40 µH

Intrinsically safe SIGNAL circuit	
Ui/Vmax	= 30 V
Ii/Imax	= 300 mA
Pi/Pmax	= 1 W
Ci	= 13 nF
Li	negligible

6. For temperature code of the MICROPILOT S see table.
7. Install barrier / associated equipment in accordance with manufacturer's instruction.
8. Use supply wires suitable for 5°C above surrounding ambient.
   Utiliser des fils d'alimentation qui conviennent a une température de 5°C au-dessus de la température ambiante.
9. In case of use of planar or parabolic antenna avoid electrostatic charge at the antenna ; (e.g. do not rub with dry cloth; do not install within the filling curtain.

CLASS I, DIV. 2, GROUP A, B, C, D or Ex nA IIC and DIP for CLASS II, DIV 1, GROUP E, F, G and CLASS III HAZARDOUS LOCATION INSTALLATION.

1. Install per Canadian Electrical code using threaded metal conduit.
2. A dust tight seal must be used at the conduit entry when the transmitter is used in a CLASS II or III location.
3. Intrinsic safety barrier not required.
   Class 2 power supply shall be used, max supply voltage 30 Vdc.
   For Temperature - code see table.
4. WARNING: Explosion hazard – Do not disconnect equipment unless power has been switched of or the area is known to be non-hazardous.
   Avertissement: Risque d'explosion – Avant de déconnecter l'équipement, couper le courant ou s'assurer que l'emplacement est désigne non dangereux.
5. WARNING: Explosion hazard - Substitution of components may impair suitability for CLASS I, DIVISION 2.
   AVERTISSEMENT: Risque d'explosion - La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de CLASSE I, DIVISION 2.