

For use in US**Hazardous (Classified) Location**

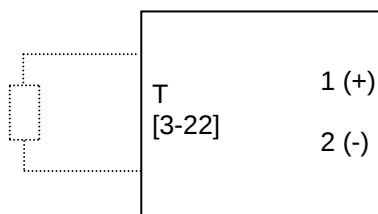
IS (Entity) Class I, Division 1, Groups C, D
or Class I, Zone 1, AEx ia IIB T4 Ga
or NI Class I, Division 2, Groups C, D

Nonhazardous Location

Endress+Hauser Yamanashi Co.,Ltd.
NMT539-70... (FMus)

Associated apparatus

Temperature
measurement circuit
(not include in
NMT539-70....;
Converter only
version)



Supply and
Interface circuits

Entity and Nonincendive Field Wiring Parameters
prothermo NMT 539-70cdef
for terminals 1 (+), 2 (-)

$U_i = V_{max} = 30 \text{ V}$
 $I_i = I_{max} = 120 \text{ mA}$
 $P_i = P_{max} = 1 \text{ W}$
 $C_i = 6.6 \text{ nF}$
 $L_i = 48 \text{ } \mu\text{H}$

$U_o = V_{oc} \leq 30 \text{ V}$
 $I_o = I_{sc} \leq 120 \text{ mA}$
 $P_o = P_{max} \leq 1 \text{ W}$
 $C_a \geq 6.6 \text{ nF} + C_{cable}$
 $L_a \geq 48 \text{ } \mu\text{H} + L_{cable}$

for terminals T[3-22] (temperature measurement circuit)

$U_o = V_{max} = 8.6 \text{ V}$
 $I_o = I_{max} = 71 \text{ mA}$
 $P_o = P_{max} = 153 \text{ mW}$
 $C_o = 9.5 \text{ } \mu\text{F}$
 $L_o = 7.5 \text{ mH}$

Notes

- The nonintrinsically safe terminals (supply and interface circuit) must not be connected to any device that uses or generates more than 250 V rms or dc unless it has been determined that the voltage has been adequately isolated.
- The installation must be in accordance with the National Electrical Code ANSI/NFPA 70 article 504 and ANSI/NFPA RP 12.6
- FM Entity approved associated apparatus necessary. Used in a configuration where associated apparatus U_o does not exceed U_i of the prothermo NMT539-70... and associated apparatus I_o does not exceed I_i of the prothermo NMT539-70... C_i of the prothermo NMT539-70... plus capacitance of interconnecting wiring may not exceed associated apparatus C_o . L_i of the prothermo NMT539-70... plus inductance of interconnecting wiring may not exceed associated apparatus L_o .
- For use in Class I, Division 2 location, rigid metal conduit is required if not installed in accordance with the nonincendive field wiring principles outlined with the National Electrical Code ANSI/NFPA 70 article 501 and ANSI/NFPA RP 12.6.

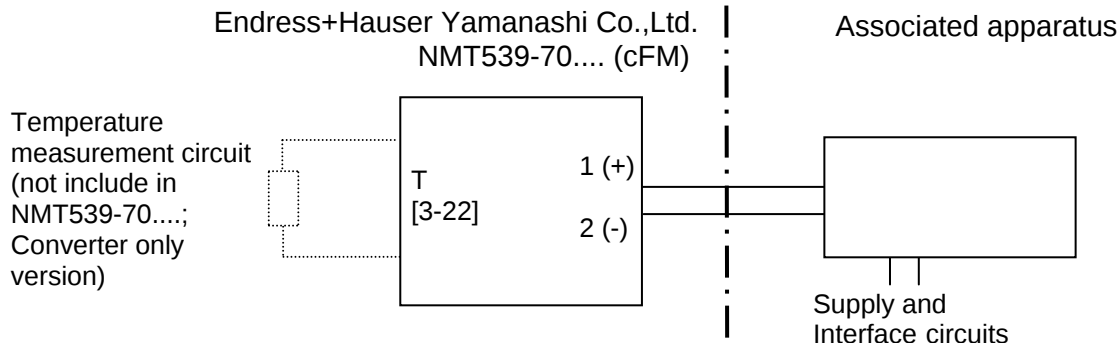
Warning:

- Substitution of components may impair intrinsic safety. For installation, maintenance or operation instructions see Instruction Manual.
- Don't modify parts and circuits of this instrument.

REV	DATE	CONTENTS	REVISED	(基) PPROVED	SCALE	ESTABLISH DATE		
						22 Feb. 2007		
						APPROVED	CHECK	DESIGN
2	25 Jan. 17	Add "For use in US", etc.	H.Mizokuni					
1	01 Jan. 08	Company name change	H.Mizokuni					
					PAGE			
Endress+Hauser 		TITLE Control drawing for NMT539-70... (FMus) (Converter only version)						
Endress+Hauser Yamanashi Co.,Ltd.								
					(基) NO	Ex461-851	Rev 2	

For use in CanadaHazardous (Classified) Location

IS (Entity) Class I, Division 1, Groups C, D
or Class I, Zone 1, Ex ia IIB T4 Gb

Nonhazardous LocationEntity and Nonincendive Field Wiring Parameters

prothermo NMT 539-70cdefghij
for terminals 1 (+), 2 (-)

$$\begin{aligned} U_i &= V_{\max} = 30 \text{ V} \\ I_i &= I_{\max} = 120 \text{ mA} \\ P_i &= P_{\max} = 1 \text{ W} \\ C_i &= 6.6 \text{ nF}, \quad L_i = 48 \mu\text{H} \end{aligned}$$

for terminals T[3-22] (temperature measurement circuit)

$$\begin{aligned} U_o &= V_{\max} = 8.6 \text{ V} \\ I_o &= I_{\max} = 71 \text{ mA} \\ P_o &= P_{\max} = 153 \text{ mW} \\ C_o &= 9.5 \mu\text{F}, \quad L_o = 7.5 \text{ mH} \end{aligned}$$

$$\begin{aligned} U_o &= V_{oc} \leq 30 \text{ V} \\ I_o &= I_{sc} \leq 120 \text{ mA} \\ P_o &= P_{\max} \leq 1 \text{ W} \\ C_a &\geq 6.6 \text{ nF} + C_{\text{cable}} \\ L_a &\geq 48 \mu\text{H} + L_{\text{cable}} \end{aligned}$$

Notes

1. The nonintrinsically safe terminals (supply and interface circuit) must not be connected to any device that uses or generates more than 250 V rms or dc unless it has been determined that the voltage has been adequately isolated.
2. The installation must be in accordance with the Canadian Electrical Code CAN/CSA C22.1.
3. Entity approved associated apparatus necessary. Used in a configuration where associated apparatus U_o does not exceed U_i of the prothermo NMT539-70... and associated apparatus I_o does not exceed I_i of the prothermo NMT539-70... C_i of the prothermo NMT539-70... plus capacitance of interconnecting wiring may not exceed associated apparatus C_o . L_i of the prothermo NMT539-70... plus inductance of interconnecting wiring may not exceed associated apparatus L_o .
4. For use in Class I, Division 2 location, rigid metal conduit is required if not installed in accordance with the nonincendive field wiring principles outlined with the Canadian Electrical Code CAN/CSA C22.1.

Warning:

1. Substitution of components may impair intrinsic safety. For installation, maintenance or operation instructions see Instruction Manual.
2. Don't modify parts and circuits of this instrument.

REV	DATE	CONTENTS	REVISED	(基) APPROVED	SCALE	ESTABLISH DATE		
					X	22 Mar. 2004		
3	25 Jan. 17	“-80...” to -70...(cFM)	H.Mizokuni			APPROVED	CHECK	DESIGN
2	01 Jan. 08	Company name change	H.Mizokuni			PAGE		
1	04 Sep 07	Change Ci value 5.3 to 7.9	H.Mizokuni	1 / 1	(基) NO			
Endress+Hauser 		TITLE Control drawing for NMT539-70...(cFM) (Converter only version)						
Endress+Hauser Yamanashi Co.,Ltd.								

À utiliser au Canada**Emplacement dangereux (classé)**

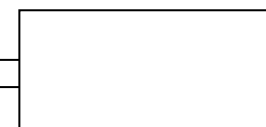
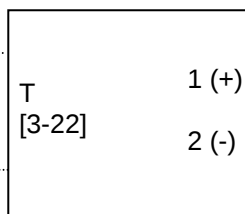
IS (Entité) Classe I, Division 1, Groupes C, D
or Classe I, Zone 1, Ex ia IIB T4 Gb

Emplacement non dangereux

Endress+Hauser Yamanashi Co.,Ltd.
NMT539-70.... (cFM)

Appareil associé

Circuit de mesure de
la température
(Ne pas inclure dans
NMT539-70;
Version Convertisseur
uniquement)



Circuits d'alimentation et
d'interface

Paramètres de câblage de terrain de l'entité et non-dynamique
Prothermo NMT539-70cdefghij
Pour les terminaux 1 (+), 2 (-)

$$\begin{aligned} U_i &= V_{\max} = 30 \text{ V} \\ I_i &= I_{\max} = 120 \text{ mA} \\ P_i &= P_{\max} = 1 \text{ W} \\ C_i &= 6.6 \text{ nF}, \quad L_i = 48 \text{ } \mu\text{H} \end{aligned}$$

$$\begin{aligned} U_o &= V_{oc} \leq 30 \text{ V} \\ I_o &= I_{sc} \leq 120 \text{ mA} \\ P_o &= P_{\max} \leq 1 \text{ W} \\ C_a &\geq 6.6 \text{ nF} + C_{\text{cable}} \\ L_a &\geq 48 \text{ } \mu\text{H} + L_{\text{cable}} \end{aligned}$$

Pour les bornes T [3-22] (Circuit de mesure de température)

$$\begin{aligned} U_o &= V_{\max} = 8.6 \text{ V} \\ I_o &= I_{\max} = 71 \text{ mA} \\ P_o &= P_{\max} = 153 \text{ mW} \\ C_o &= 9.5 \text{ } \mu\text{F}, \quad L_o = 7.5 \text{ mH} \end{aligned}$$

Remarques

1. Les bornes non intrinsèquement sécurisées (alimentation et circuit d'interface) ne doivent pas être connectées à un périphérique qui utilise ou génère plus de 250 V rms ou dc à moins qu'il ait été déterminé que la tension a été isolée de manière adéquate.
2. L'installation doit être conforme au Code canadien de l'électricité CAN / CSA C22.1.
3. Les appareils associés approuvés par l'Entité sont nécessaires. Utilisé dans une configuration où l'appareil associé U_o ne dépasse pas U_i du prothermo NMT539-7 ... et les appareils associés I_o ne dépassent pas I_i du prothermo NMT539-7 ... C_i de la prothermo NMT539-7 ... plus la capacité Du câblage d'interconnexion ne doit pas dépasser les appareils associés C_o . L_i du prothermo NMT539-7 ... plus l'inductance du câblage d'interconnexion ne doit pas dépasser les appareils associés L_o .
4. Pour une utilisation dans l'emplacement de la Classe I, Division 2, un conduit de métal rigide est requis s'il n'est pas installé conformément aux principes de câblage non allongés énoncés dans le Code Électrique Canadien CAN / CSA C22.1.

Attention:

1. La substitution des composants peut entraver la sécurité intrinsèque. Pour les instructions d'installation, de maintenance ou d'utilisation, voir le manuel d'instructions.
2. Ne modifiez pas les pièces et les circuits de cet instrument.

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1	04 Sep 07	Change Ci value 5.3 to 7.9	H.Mizokuni					PAGE
Endress+Hauser 		TITLE Dessin de contrôle pour NMT539-70...(cFM) (Version Convertisseur niquement)				(基) NO	Ex462-712	Rev. 3
Endress+Hauser Yamanashi Co.,Ltd.								