



Member of the FM Global Group

FM Approvals  
1151 Boston Providence Turnpike  
P.O. Box 9102 Norwood, MA 02062 USA  
T: 781 762 4300 F: 781-762-9375 www.fmapprovals.com

# CERTIFICATE OF COMPLIANCE

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

***CHabcd. Connection Head***

***CHabcd/FG118/TCefghij. Thermocouple Assembly***

***CHabcd/FG118/klmn. RTD Assembly***

***CHabcd/FG118/klmn/TToplq. Transmitter Assembly***

XP/II/BCD/260°C, DIP/II,III/IEFG/260°C; Type 3, 4, 4X

a = Type of connection head 105, 107, 342 or 343.

b = Pipe thread code P1, P2, P3 or P4 (P3/P4 for Connection Head only).

c = Type of connection points T or W.

d = No. of connection points 0 or 6.

e = Model No 2160, 2192, 2654, or 2666.

f = Thermocouple type E, J, K or T.

g = Junction U or G.

h = Case length "A" in 0.1 in. increments: min = 52, max = 480.

i = Covering over leads T, G or S.

j = Lead length "B" inches.

k = Model No. and sensing element code Simplex: S334CA, S334FA, S334NA, S334PA, S834PD, S837PF, S864PE, S9522CA, S9522NA, S9522FA, S9522PA, S12682PD, S100520PE, or Duplex: S347CC, S347NA, S347PA, S847PD, S877PE, S897PF, S10430NA, S10430PA, S12416PD, or S100521PE.

l = Case length "A" in 0.1 in. increments: min = 52, max = 480.

m = No. of leads X, Y, or Z.

n = Lead length "B" inches.

o = Model No. 110, 111, 150, 151, 176, 177, 190, 201, 205, 210, 211, 216, 220, 221, 230, 246, 676, 701, 710, 711, 720, or 746.

p = Sensing element simplex: CA, FA, NA, PA, PD, PE, PF, E, J, K, T, EU, JU, KU or TU.

q = One or two letter temperature range code: A through Z or AA through ZZ.

***CHabcd. Connection Head.***

***CHabcd/FG118/TC21efghij. Thermocouple Assembly.***

***CHabcd/FG118/klmn. RTD Assembly.***

***CHabcd/FG118/klmn/TToplq. Transmitter Assembly.***

XP/III/ABCD/260°C, DIP/II,III/IEFG/260°C; Type 3, 4, 4X

a = Type of connection head 405 or 407.

b = Pipe thread code P1, P2, P3 or P4 (P3/P4 for connection head only).

c = Type of connection point T or W.  
d = No. of connection points 0 or 6.  
e = Model No. 60 or 92.  
f = Thermocouple type E, J, K or T.  
g = Junction U or G.  
h = Case length "A" in 0.1 in. increments: min = 52, max = 480.  
i = Covering over leads T, G or S.  
j = Lead length "B" in in.  
k = Model No. and sensing element code Simplex: S334CA, S334FA, S334NA, S334PA, S834PD, S864PE or Duplex: S347CC, S347NA, S347PA, S847PD or S877PE.  
l = Case length "A" in 0.1 in. increments: min = 52, max = 480.  
m = No. of leads Y or Z.  
n = Lead length "B" in in.  
o = Model No. 110, 220, 221, 230, 246, 111, 150, 151, 176, 177, 190, 201, 205, 210, 211, 216, 676, 701, 710, 711, 720 or 746.  
p = Sensing element Simplex CA, FA, NA, PA, PD, PE, E, J, K, T, EU, JU, KU or TU.  
q = One or two letter temperature range code A through Z or AA through ZZ.

**AS51abcde. RTD Assembly.**

**AS51fghce. Thermocouple Assembly.**

**AS5190TTijcPe. Thermocouple Assembly.**

XP/III/BCD/260°C, DIP/II,III/IV/EFG/260°C; Type 3, 4, 4X

a = Model No. Simplex 80 or Duplex 81.

b = Sensing element PA, PD, PE, PF, CA, CC, FA or NA.

c = Insertion depth in 0.1 in. increments min 15, max 465.

d = No. of leads X, Y, or Z.

e = Pipe thread code 1 or 2.

f = Model No. Simplex 85 or Duplex 86.

g = Thermocouple type E, J, K or T.

h = Junction U or G.

i = Transmitter Model No. 110, 111, 150, 151, 176, 177, 190, 201, 205, 210, 211, 216, 220, 221, 230, 246, 676, 701, 710, 711, 720 or 746.

j = One or two letter temperature code A through Z or AA through ZZ.

**AS53abcdef. RTD Assembly.**

**AS53abghdPf. Thermocouple Assembly.**

**AS53abTTijdcf. RTD Transmitter Assembly.**

**AS53abTTijdghf. Thermocouple Transmitter Assembly.**

**AS54abcdef. RTD Assembly.**

**AS54abghdPf. Thermocouple Assembly.**

**AS54abTTijdcf. RTD Transmitter Assembly.**

**AS54abTTijdghf. Thermocouple Transmitter Assembly.**

XP/III/BCD/260°C, DIP/II,III/IV/EFG/260°C; Type 3, 4, 4X

a = Probe type 0, 1, 2, 3, 4, 6, 7, 8 or 9.

b = Fitting type 1, 2, 3, 4, 5 or 6.

c = Sensing element PA, PD, PE, CA, CC, FA or NA.

d = Insertion depth in 0.1 in. increments min 15.

e = No. of leads X, Y or Z.

f = Pipe thread code 3 or 4.

g = Thermocouple type E, J, K or T.

h = Junction U or G.

i = Transmitter Model No. 110 through 999.

j = One or two letter temperature code A through Z or AA through ZZ.



*Member of the FM Global Group*

## Equipment Ratings:

Explosionproof for Class I, Division 1, Groups B, C, and D

Equipment marked (\*) also suitable for Group A

Dust-Ignitionproof for Class II/III, Division 1, Groups E, F, and G

Enclosure Type 4.

## FM Approved for:

Minco Products Inc.

Minneapolis, MN, USA



This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1989
Class 3615	1989
Class 3810	1989

Original Project ID: 1N2A5.AE

Approval Granted: November 2, 1987

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
1V8A2.AE	October 3, 1991		
1V9A6.AE	October 22, 1991		
0W7A1.AE	November 10, 1992		
1X3A2.AE	September 24, 1993		
2Z7A3.AE	February 28, 1996		
3D7A8.AE	May 4, 1998		
3006485	December 16, 1999		
3006610	January 6, 2000		
120102	January 24, 2012		

FM Approvals LLC

J.E. Marquedant  
Group Manager, Electrical

24 January 2012  
Date