

MINISTERO DELL'INDUSTRIA DEL COMMERCIO E DELL'ARTIGIANATO
DICHIARAZIONE DI CONFORMITA'
DELL'IMPIANTO A REGOLA D'ARTE
ART.9 LEGGE N.46 DEL 5 MARZO 1990 - D.M. 20 FEBBRAIO 1992 - D.P.R. 18 APRILE 1994, N. 392

Revisione Impianto elettrico - Sala Congregazioni
Palazzo Civico - P.zza Palazzo di Città 1 - TORINO

Il sottoscritto **DE FRANCESCO GIANDOMENICO**

Titolare o legale rappresentante dell'impresa **I.R.M.E. S.R.L.**

Operante nel settore **IMPIANTI ELETTRICI,**

Con sede in **Via Villafranca, 25 di San Mauro Torinese (TO) tel. 011.8222510 Part. IVA 08649110015**

Iscritta al R.I. e al R.E.A. (R.D. 20.09.1934, n.2011 - Art.8, L.29.12.1993 n. 580 - D.P.R. 07.12.1995 n.581)

Alla C.C.I.A.A. di **TORINO n. 989634**

Esecutrice dell'impianto (descrizione schematica): **Revisione impianto elettrico Luce normale, di emergenza, F.M. .**

Inteso come: nuovo impianto trasformazione ampliamento manutenzione straordinaria altro

Commissionato da **IRIDE SERVIZI S.p.A. - Via Bertola, 48 - 10122 TORINO**

Installato nei locali siti in **Sala Congregazioni, piano 1°, Piazza Palazzo di Città, 1 - TORINO**

Di proprietà di **Comune di Torino - Piazza Palazzo di Città - TORINO**

In edificio adibito ad uso: industriale civile commercio altri usi: **Salone**

DICHIARA

Sotto la propria responsabilità, che l'impianto è stato realizzato in modo conforme alla regola d'arte, secondo quanto previsto dall'Art. 7 della legge n. 46/1990, tenuto conto delle condizioni di esercizio e degli usi a cui è destinato l'edificio, avendo in particolare:

- Rispettato il progetto (per gli impianti con obbligo di progetto, ai sensi dell'art. 6 della legge n. 46/1990);
- Seguito dalla normativa tecnica applicabile all'impiego: CEI 64/8
- Installato componenti e materiali costruiti a regola d'arte e adatti al luogo di installazione, art.7 della legge 46/1990;
- Controllato l'impianto ai fini della sicurezza e della funzionalità con esito positivo, avendo eseguito la verifiche richieste dalle norme e dalle disposizioni di legge.

Allegati obbligatori

- Progetto (solo per gli impianti con obbligo di progetto);
- Relazione con tipologia dei materiali utilizzati;
- Schema di impianto realizzato;
- Riferimento a dichiarazioni di conformità precedenti o parziali già esistenti;
- Copia di certificato di riconoscimento dei requisiti tecnico-professionali.

Allegati facoltativi:

DECLINA

Ogni responsabilità per sinistri a persone o a cose derivanti da manomissione dell'impianto da parte di terzi ovvero da carenza di manutenzione o riparazione.

Data **28.11.2008**

Il dichiarante

I.R.M.E. s.r.l.


AVVERTENZE PER IL COMMITTENTE (responsabilità del committente o del proprietario) L.46/1990 art. 10

Data

Firma



CAMERA DI COMMERCIO
INDUSTRIA ARTIGIANATO E AGRICOLTURA
DI TORINO

Prot. N. 5689/2010/CTO0262

17/3/2010

CAMERA DI COMMERCIO INDUSTRIA ARTIGIANATO E AGRICOLTURA DI TORINO
- UFFICIO REGISTRO DELLE IMPRESE -

CERTIFICATO DI ISCRIZIONE NELLA SEZIONE ORDINARIA

DATI IDENTIFICATIVI DELL'IMPRESA

Codice fiscale e numero d'iscrizione: 08649110015
del Registro delle Imprese di TORINO
data di iscrizione: 30/04/2003

Iscritta nella sezione ORDINARIA

il 30/04/2003

Iscritta con il numero Repertorio Economico Amministrativo 989634

Denominazione: I.R.M.E. S.R.L.

Forma giuridica: SOCIETA' A RESPONSABILITA' LIMITATA

Sede:
SAN MAURO TORINESE (TO) VIA VILLAFRANCA, 25 CAP 10099

Costituita con atto del 17/04/2003

Durata della società:
data termine: 31/12/2050

OGGETTO SOCIALE:

. LO STUDIO, LA PROGETTAZIONE FINALIZZATA ALLA REALIZZAZIONE, L'ESECUZIONE, LA GESTIONE E LA MANUTENZIONE DI IMPIANTI DI PRODUZIONE, DI TRASPORTO, DI DISTRIBUZIONE E DI UTILIZZAZIONE DELL'ENERGIA ELETTRICA ALL'INTERNO DI EDIFICI INDUSTRIALI E CIVILI, DI IMPIANTI RADIOTELEVISIVI ED ELETTRONICI IN GENERE, ANTENNISTICI E DI PROTEZIONE DA SCARICHE ATMOSFERICHE E DI IMPIANTI DI PROTEZIONE ANTINCENDIO;

. LA COSTRUZIONE DI QUADRI ELETTRICI ED APPARECCHIATURE ELETTROMECCANICHE;

. LA COSTRUZIONE DI IMPIANTI SEMAFORICI OVVERO SEGNALETICA LUMINOSA E PER LA SICUREZZA DEL TRAFFICO;

. LA COSTRUZIONE DI IMPIANTI DI ILLUMINAZIONE PUBBLICA E RELATIVE OPERE EDILI CONNESSE QUALI SCAVI, REINTERRI, RIPRISTINI STRADALI;

. OPERE EDILI IN GENERE;

. IL COMMERCIO ALL'INGROSSO DI MATERIALE ED APPARECCHIATURE ELETTRICHE;

. LA RAPPRESENTANZA DI CASE ITALIANE ED ESTERE COSTRUTTRICI DI MACCHINARI ED ARTICOLI ELETTRICI.

IL TUTTO CON ESPRESSA ESCLUSIONE DI QUALSIASI ATTIVITA' RISERVATA A

PROFESSIONISTI ISCRITTI IN APPOSITI ALBI.

LA SOCIETA' POTRA' COMPIERE QUALUNQUE OPERAZIONE MOBILIARE, IMMOBILIARE, COMMERCIALE, INDUSTRIALE E FINANZIARIA UTILE AL RAGGIUNGIMENTO DELLO SCOPO SOCIALE IVI INCLUSA L'ASSUNZIONE DI PARTECIPAZIONI ED INTERESSENZE IN ALTRE SOCIETA' OD IMPRESE AVENTI SCOPI ANALOGHI, AFFINI O CONNESSI AL PROPRIO, COMUNQUE IN VIA NON PREVALENTE, NON A FINI DI COLLOCAMENTO E NON NEI CONFRONTI DEL PUBBLICO.

SONO TASSATIVAMENTE ESCLUSE LE ATTIVITA' PER LE QUALI IL D.L. 58/98 RICHIEDE REQUISITI DIVERSI DA QUELLI DI CUI ALLA PRESENTE SOCIETA', L'ATTIVITA' BANCARIA, L'ATTIVITA' ASSICURATIVA, NONCHE' TUTTE LE ALTRE ATTIVITA' VIETATE O COMUNQUE RISERVATE DALLA PRESENTE E FUTURA LEGISLAZIONE A SOCIETA' AVENTI REQUISITI DIVERSI DA QUELLI DI CUI ALLA PRESENTE SOCIETA'.

SISTEMA DI AMMINISTRAZIONE E CONTROLLO

- AMMINISTRATORE UNICO
numero componenti in carica: 1

INFORMAZIONI SULLO STATUTO

Poteri associati alla carica di AMMINISTRATORE UNICO:



CAMERA DI COMMERCIO
INDUSTRIA ARTIGIANATO E AGRICOLTURA

PROT. CED. DI TORINO /CTO0262

17/3/2010

LA FIRMA SOCIALE E LA LEGALE RAPPRESENTANZA DELLA SOCIETA' DI FRONTE AI TERZI ED IN GIUDIZIO SPETTANO ALL'AMMINISTRATORE UNICO.
L'AMMINISTRATORE UNICO E' INVESTITO DI TUTTI I POTERI DI ORDINARIA E STRAORDINARIA AMMINISTRAZIONE. L'AMMINISTRATORE UNICO POTRA' NOMINARE E REVOCARE PROCURATORI PER SINGOLI ATTI O PER CATEGORIE DI ATTI.

INFORMAZIONI PATRIMONIALI E FINANZIARIE

Capitale Sociale in EURO:
deliberato 20.000,00
sottoscritto 20.000,00
versato 20.000,00
conferimenti in DENARO

ATTIVITA'

Data d'inizio dell'attività dell'impresa: 21/07/2003

Attività esercitata nella sede legale:
COMMERCIO ALL'INGROSSO DI MATERIALE ELETTRICO - COSTRUZIONE QUADRI E APPARECCHIA
TURE ELETTROMECCANICHE - COSTRUZIONE IMPIANTI SEMAFORICI E SEGNALETICA -
COSTRUZIONE IMPIANTI ILLUMINAZIONE PUBBLICA.
DAL 02/10/2003 INSTALLAZIONE, MAANUTENZIONE, TRASFORMAZIONE, AMPLIAMENTO DI
IMPIANTI ELETTRICI, ELETTRONICI ED ANTINCENDIO L.46/90 LETT.A-B-G.

TITOLARI DI CARICHE O QUALIFICHE

* RUSSOMANDO PALMINA

nata a GIFFONI VALLE PIANA (SA) il 04/01/1938
codice fiscale: RSSPMN38A44E027H
- AMMINISTRATORE UNICO nominato con atto del 02/01/2004
presentazione il 14/01/2004
durata in carica FINO ALLA REVOCA

* DE FRANCESCO GIANDOMENICO

nato a TORINO (TO) il 11/02/1972
codice fiscale: DFRGDM72B11L219Z
- PROCURATORE nominato con atto del 17/04/2003
durata in carica A TEMPO INDETERMINATO

Poteri:

PROCURA REP. 968/780 DEL 05/02/2007 NOTAIO CARUSO CLAUDIO
DISGIUNTAMENTE DAL PROCURATORE SIGNOR DE FRANCESCO ALBERTO ABBIA A:
- COSTITUIRSI IN RAGGRUPPAMENTO DI IMPRESE AI SENSI DEL DECRETO LEGISLATIVO 19
DICEMBRE 1991 N. 40 E SUCCESSIVE MODIFICHE O INTEGRAZIONI, SIA IN VESTE DI
MANDANTE CHE DI MANDATARIA CAPOGRUPPO;
- CONCORRERE AD ASTE ED INCANTI PUBBLICI E PRIVATI IN GENERE, RAPPRESENTANDO LA
MANDANTE NELLA STIPULA DI CONTRATTI PER L'ESECUZIONE DI LAVORI AFFIDATI OD
AGGIUDICATI ALLA SOCIETA' STESSA NONCHE' IN TUTTI GLI ATTI ED OPERAZIONI PER
L'ESECUZIONE DEI LAVORI STESSI E COSI' IN VIA ESEMPLIFICATIVA:
- SOTTOSCRIVERE I VERBALI DI CONSEGNA, DI SOSPENSIONE, DI RIPRESA, DI
ULTIMAZIONE DEI LAVORI, CONCORDARE PREZZI AGGIUNTIVI, FIRMARE GLI ATTI
CONTABILI DEGLI STATI DI AVANZAMENTO O DI LIQUIDAZIONE DEI LAVORI E GLI ATTI
RELATIVI AI COLLAUDI, IMPEGNANDO VALIDAMENTE LA SOCIETA' MANDANTE NEI CONFRONTI
DELLE PUBBLICHE AMMINISTRAZIONI CIVILI E MILITARI COMMITTENTI, NONCHE' DI
PRIVATI;
- RISCOUTERE LE FATTURE EMESSE DALLA SOCIETA' RILASCIANDO REGOLARE QUIETANZA.
- RESPONSABILE TECNICO nominato il 02/10/2003

* DE FRANCESCO ALBERTO

nato a TORINO (TO) il 21/09/1977
codice fiscale: DFRLRT77P21L219V
- PROCURATORE nominato con atto del 17/04/2003
durata in carica A TEMPO INDETERMINATO

Poteri:

PROCURA REP.968/780 DEL 05/02/2007 NOTAIO CARUSO CLAUDIO*



CAMERA DI COMMERCIO
INDUSTRIA ARTIGIANATO E AGRICOLTURA

Prot. CEV/TORINO/CTO0262

17/3/2010

- DISGIUNTAMENTE DAL PROCURATORE SIGNOR DE FRANCESCO GIANDOMENICO ABBIA A:
- COSTITUIRSI IN RAGGRUPPAMENTO DI IMPRESE AI SENSI DEL DECRETO LEGISLATIVO 19 DICEMBRE 1991 N. 40 E SUCCESSIVE MODIFICHE O INTEGRAZIONI, SIA IN VESTE DI MANDANTE CHE DI MANDATARIA CAPOGRUPPO;
 - CONCORRERE AD ASTE ED INCANTI PUBBLICI E PRIVATI IN GENERE, RAPPRESENTANDO LA MANDANTE NELLA STIPULA DI CONTRATTI PER L'ESECUZIONE DI LAVORI AFFIDATI OD AGGIUDICATI ALLA SOCIETA' STESSA NONCHE' IN TUTTI GLI ATTI ED OPERAZIONI PER L'ESECUZIONE DEI LAVORI STESSI E COSI' IN VIA ESEMPLIFICATIVA:
 - SOTTOSCRIVERE I VERBALI DI CONSEGNA, DI SOSPENSIONE, DI RIPRESA, DI ULTIMAZIONE DEI LAVORI, CONCORDARE PREZZI AGGIUNTIVI, FIRMARE GLI ATTI CONTABILI DEGLI STATI DI AVANZAMENTO O DI LIQUIDAZIONE DEI LAVORI E GLI ATTI RELATIVI AI COLLAUDI, IMPEGNANDO VALIDAMENTE LA SOCIETA' MANDANTE NEI CONFRONTI DELLE PUBBLICHE AMMINISTRAZIONI CIVILI E MILITARI COMMITTENTI, NONCHE' DI PRIVATI;
 - RISCOUTERE LE FATTURE EMESSE DALLA SOCIETA' RILASCIANDO REGOLARE QUIETANZA.
 - RESPONSABILE TECNICO nominato il 02/10/2003

CERTIFICAZIONE DI CUI ALLA LEGGE 46/90

ABILITAZIONI:

L'impresa, ai sensi della Legge 5 marzo 1990 n. 46 recante norme per la sicurezza degli impianti, è abilitata, salvo le eventuali limitazioni più sotto specificate, all'installazione, alla trasformazione, all'ampliamento e alla manutenzione degli impianti di cui all'Art. 1 della Legge n. 46/1990 come segue:

1) lettera A

PER GLI IMPIANTI DI PRODUZIONE, DI TRASPORTO, DI DISTRIBUZIONE E DI UTILIZZAZIONE DELL'ENERGIA ELETTRICA ALL'INTERNO DEGLI EDIFICI A PARTIRE DAL PUNTO DI CONSEGNA DELL'ENERGIA FORNITA DALL'ENTE DISTRIBUTORE.

Data riconoscimento: 02/10/2003 Ente: CAMERA DI COMMERCIO

2) lettera B

PER GLI IMPIANTI RADIOTELEVISIVI ED ELETTRONICI IN GENERE, LE ANTENNE E GLI IMPIANTI DI PROTEZIONE DA SCARICHE ATMOSFERICHE.

Data riconoscimento: 02/10/2003 Ente: CAMERA DI COMMERCIO

3) lettera G

PER GLI IMPIANTI DI PROTEZIONE ANTINCENDIO

Data riconoscimento: 02/10/2003 Ente: CAMERA DI COMMERCIO

RESPONSABILI TECNICI:

* DE FRANCESCO GIANDOMENICO

nato a TORINO (TO) il 11/02/1972

Codice Fiscale: DFRGDM72B11L219Z

residente a BOSCONERO (TO) VIA MONSIGNOR RE 12 CAP 10080

- PROCURATORE

- RESPONSABILE TECNICO

per l'esercizio delle attività di cui alla lettera A, B, G

Data riconoscimento: 02/10/2003 Ente: CAMERA DI COMMERCIO

* DE FRANCESCO ALBERTO

nato a TORINO (TO) il 21/09/1977

Codice Fiscale: DFRLRT77P21L219V

residente a SAN MAURO TORINESE (TO) VIA PAPA GIOVANNI XXIII 1 CAP 10100

- PROCURATORE

- RESPONSABILE TECNICO

per l'esercizio delle attività di cui alla lettera A, B, G

Data riconoscimento: 02/10/2003 Ente: CAMERA DI COMMERCIO

Il presente certificato riporta le notizie/dati iscritti nel Registro alla data odierna.



CAMERA DI COMMERCIO
INDUSTRIA ARTIGIANATO E AGRICOLTURA
DI TORINO

Prot. GEV/5509/2010/CT00262

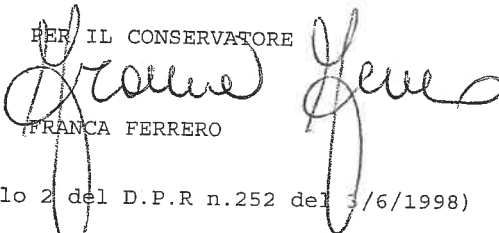
17/3/2010

IMPOSTA DI BOLLO ASSOLTA IN MODO VIRTUALE - AUTORIZZAZIONE DELL'INTENDENZA DI F
NANZA DI TORINO N. 26204 DEL 5/11/1975.

RISCOSSI PER NR BOLLI 2 EURO 29,24
PER DIRITTI EURO 10,00
TOTALE EURO 39,24
TOTALE CON GLI IMPORTI ESPRESSI IN LIRE: 75979

DAGLI ATTI DELL'UFFICIO LA SUDETTA IMPRESA NON RISULTA IN STATO DI
FALLIMENTO, CONCORDATO PREVENTIVO O DI AMMINISTRAZIONE CONTROLLATA.
SI DICHIARA INOLTRE CHE A CARICO DELLA PREDETTA DITTA NON RISULTA
PERVENUTA NEGLI ULTIMI 5 ANNI A QUESTO UFFICIO DICHIARAZIONE DI
FALLIMENTO, LIQUIDAZIONE AMMINISTRATIVA COATTA, AMMISSIONE IN CONCORDATO
O AMMINISTRAZIONE CONTROLLATA

PER IL CONSERVATORE



FRANCA FERRERO

SOGGETTI CONTROLLATI (articolo 2 del D.P.R n.252 del 3/6/1998)

Codice fiscale	Denominazione	Pr.sede		
08649110015	I.R.M.E. S.R.L.	TO		
Cognome	Nome	Sesso	Pr.nasc.	Dt nasc.
RUSSOMANDO	PALMINA	F	SA	04/01/1938
DE FRANCESCO	GIANDOMENICO	M	TO	11/02/1972
DE FRANCESCO	ALBERTO	M	TO	21/09/1977

N U L L A O S T A

ai fini dell'articolo 10 della legge 31 maggio 1965, n.575 e successive
modificazioni.

La presente certificazione è emessa dalla C.C.I.A.A. utilizzando il collegamento
telematico con il sistema informativo utilizzato dalla prefettura di Roma.

*** fine certificato ***

I.R.M.E. S.R.L.

Via Villafranca, 25

10099 – San Mauro Torinese

Tel. 011.8222510 – Fax 011.8221270

COMMITTENTE:

IRIDE SERVIZI SPA – VIA BERTOLA, 48 – 10122 TORINO

LUOGO:

SALA CONGREGAZIONI – PIANO 1°

PALAZZO CIVICO – PIAZZA PALAZZO DI CITTA', 1 - TORINO

OGGETTO:

REVISIONE E SISTEMAZIONE IMPIANTI ELETRICI ESISTENTI.

FINALITA':

**RELAZIONE CON TIPOLOGIA DI MATERIALI UTILIZZATI E
ALLEGATO ALLA DICHIARAZIONE DI CONFORMITA' DELL'IMPIANTO
(ART.9 LEGGE N.46 DEL 5.3.1990)**

I.R.M.E. S.R.L.

Via Villafranca, 25

10099 – San Mauro Torinese

Tel. 011.8222510 – Fax 011.8221270

Premessa

La sottoscritta I.R.M.E. s.r.l. corrente in San Mauro T.se, Via Villafranca, 25, iscritta alla C.C.I.A.A. di Torino al n. 989634, esecutrice degli impianti elettrici relativi alla revisione e sistemazione degli impianti Elettrici nella Sala Congregazioni all'interno dell'edificio Palazzo Civico in Piazza Palazzo di Citta', 1 - Torino, sottoscrive attraverso il proprio legale rappresentante e sotto la propria responsabilità che l'impianto è stato realizzato in modo conforme alla regola d'arte utilizzando i materiali e componenti di seguito elencati, inoltre dichiara:

- Che sono stati utilizzati materiali e componenti elettrici a norme CEI, nonché con marchio IMQ o equivalente europeo;
- Che è stato controllato l'impianto ai fini della funzionalità e della sicurezza per le persone e per i luoghi interessati;
- Che l'impianto garantisce affidabilità e continuità di esercizio nei luoghi interessati;
- Che l'impianto risulta possedere i requisiti di flessibilità ed espandibilità con conseguente facilità di gestione e manutenzione;
- Che i singoli componenti così come tutto l'impianto risultano idonei e compatibili con l'ambiente di installazione;
- Che la conformità dichiarata viene assicurata nel tempo finché l'impianto sarà sottoposto a regolare manutenzione e che lo stesso non venga manomesso o modificato.

La stessa I.R.M.E. s.r.l. dichiara di essere abilitata ai sensi della Legge 5.3.1990 n.46 per le seguenti attività:

- Lettera A - Impianti elettrici all'interno di edifici
- Lettera B - Impianti radiotelevisivi, antenne, protezione scariche atmosferiche
- Lettera G - Impianti di protezione antincendio.

I.R.M.E. S.R.L.

Via Villafranca, 25
10099 – San Mauro Torinese
Tel. 011.8222510 – Fax 011.8221270

Relazione

I lavori eseguiti, all'interno della Sala Congregazioni, piano 1° di Palazzo Civico, sono stati i seguenti:

- Sostituzione di tutti i corpi illuminanti
- Riposizionamento e ricollegamento dei lampadari e delle applique esistenti, (revisionati da altre aziende)
- Sistemazioni e verifiche impianti F.M.
- Installazione di cavo tipo termosensibile sopra al controsoffitto, come implementazione dell'impianto rilevazioni incendi esistente.

L'alimentazione elettrica è stata presa dalle dorsali Luce e/o F.M. esistenti al piano o nei locali.

Si è provveduto inoltre alla verifica dei punti presa e dei punti luce con misura dei conduttori e verifica dello sfilaggio degli stessi.

I.R.M.E. S.R.L.

Via Villafranca, 25
10099 – San Mauro Torinese
Tel. 011.8222510 – Fax 011.8221270

MATERIALE UTILIZZATO

Tubo PVC
Guaine, raccordi, pezzi speciali
Canale PVC
Scatole portapparecchi
Cassette di derivazione
Quadretti portapparecchi
Prese, interruttori Pulsanti
Interruttori modulari
Conduttori unipolari N07V-K
Cavi multipolari FG70-R/4
Componenti rivelazione incendi
Cavo termosensibile
Corpi illuminanti
Lampade e Tubi fluorescenti
Collari, morsetti, capicorda

CASA COSTRUTTRICE

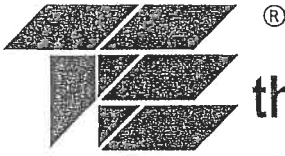
DIELECTRIX
RECORDVINIL
BOCCHIOTTI
GEWISS
GEWISS
GEWISS
GEWISS
ABB ELETTRONCONDUTTURE
CEAT CAVI
ARISTON CAVI
NOTIFIER
TERMOSTICK ELETTRONTECNICA
DISANO
PHILIPS/OSRAM
CARPANETO

San Mauro Torinese, 28.11.2008

I.R.M.E. s.r.l.
VIA VILLAFRANCA, 25
10099 SAN MAURO T.S.E. (TO)
Tel. 011.8222510 - Fax 011.8221270

IRIDE SERVIZI Aggiornamento
documentale

N. 742



thermostick eletrotecnica srl

Via Sentirone, 10 (loc. Incirano)
20037 PADERNO DUGNANO (MI)
Tel. 02 910.80.135 / 02 910.82.755 Fax 02 990.47.326
P.IVA 02332610969 - Cod. Fisc.:01421360155
Capitale Sociale: € 42.120,00
C.C.I.A.A. Milano 670028
Trib. Milano N. 123799/voi 3174/fasc. 49
e-mail: info@thermostick.com
Web: www.thermostick.com

Paderno Dugnano, 30/07/08

VA/pm

SPETT.LE
NOTIFIER ITALIA SRL
VIA GRANDI 22
20097 S. DONATO MILANESE MI

CERTIFICATO DI CONFORMITA'
(EN 10204)

Certifichiamo la conformità all'ordine della nostra fornitura di cavo termosensibile PROTECTOWIRE, certificato per applicazioni interno/esterno (indoor/outdoor).
Alleghiamo inoltre la relativa certificazione UL/FM

ORDINE : N. 81672 DEL 22/07/08
NS. COMMESSA: N. 08/00700
TIPO CAVO: PHSC-190 EPC 88°C
QUANTITA': MT. 100 - lotto n.08/0004
D.D.T.: N. 00818 DEL 30/07/08

Il cavo è stato da noi testato e i conduttori non sono in corto circuito.

THERMOSTICK ELETTROTECNICA

NOT to be distributed outside the FACTORY MUTUAL SYSTEM, except by CLIENT.

APPROVAL REPORT

**TYPE EPC
LINEAR HEAT DETECTION CABLE
FOR FIRE ALARM SIGNALING SYSTEMS**

Prepared For:

**The Protectowire Company
P. O. Box A
Hanover, MA 02339**

J.I. 0T0A9.AY

(3210)

October 3, 1990



Factory Mutual Research

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062

**Factory Mutual Research**

October 18, 1990

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062
Telephone (617) 762-4300
Telex 92-4415The Protectowire Company
P. O. Box A
Hanover, MA 02339

Attn: Mr. William Doherty, Vice President of Engineering

Subject: Approval Examination of Type EPC Linear Heat Detection Cable
Ref. FMRC J.I. OTOA9.AY - Correction

Gentlemen:

Thank you for pointing out the errors in section 1.2 our report. This letter confirms that description of the Type WFR was incorrect and that the description of your "standard construction" cable was omitted. Section 1.2 has been revised as follows:

1.2 The "standard construction", Type P, WPP, WFR cables were previously examined under FMRC Report OEOA9.AY. The difference between the previously examined cables and EPC cable is the outer cover material. The "standard construction" has a cotton braid; Type P has a tape wrap; Type WPP has a tape wrap over asphalt; Type WFR has a fiberglass braid cover over fire retardant tape wrap; Type EPC has an extruded PVC cover.

I have corrected the master copy, so that subsequent copies will be correct. Since the Approval listing is not effected by this change, a revised report will not be issued.

Very truly yours,

Mayo E. Brown, Jr.
Asst. Manager
Systems Sectioncc: TIC 3210 Class File
TIC Serial File



Factory Mutual Research

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062

J.I. 0T0A9.AY
(3210)

October 3, 1990

TYPE EPC LINEAR HEAT DETECTION CABLE FOR FIRE ALARM SIGNALING SYSTEMS

from

The Protectowire Company
P. O. Box A
Hanover, MA 02339

I INTRODUCTION

1.1 The Protectowire Company requested FMRC Approval of their Type EPC linear heat detector cable for use with fire alarm signaling systems.

1.2 Type P, WPP, WFR cables were previously examined under FMRC Report 0E0A9.AY. The difference between the previously examined cable and EPC cable is the outer cover material. Type P has a tape wrap; Type WPP has a tape wrap over asphalt; Type WFR has a cotton braid cover; Type EPC has an extruded PVC cover.

1.3 The following standard was used for the examination and evaluation of the equipment included in this report:

Factory Mutual Research Corporation, Approval Standard Thermostats for Automatic Fire Detection, Class 3210 (July 1978)

1.4 The Protectowire listing in the Factory Mutual Research Approval Guide under Fire Detection, Heat-Actuated will be revised to add the following to the existing listing:

Type P, WPP, WFR, EPC, fixed temperature, heat-sensitive cable for area heat detection: regular, 155°F (68°C); intermediate, 190°F (88°C); high 280°F (138°C). Rated for 30Vac, 42Vdc. Spacing Guide: 25 ft. X 25 ft. (7.6m X 7.6m) max.

4.4 Due to the similarity to cable previously tested under FMRC Report 0E0A9.AY no further testing was deemed necessary.

V FACILITIES AND PROCEDURES AUDIT

Protectowire's manufacturing facilities in Hanover, MA is currently included in FMRC's Facilities and Procedures Audit program. The addition of this equipment to the manufacturer's currently Approved product line represented no change to manufacturing or quality control procedures that would require a special audit. The facilities and quality control procedures will continue to be inspected annually for as long as this Approval is in effect.

VI MANUFACTURER'S RESPONSIBILITIES

6.1 The manufacturer shall provide instructions for installation, operation, and maintenance with each unit of cable.

6.2 The manufacturer shall advise Factory Mutual Research Corporation of all proposed changes to the material shown in the Documentation List (Appendix I) of this report via the Approved Product Revision Report (Form 797).

VII CONCLUSION

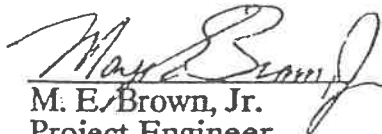
The Type EPC linear heat detector cable meets FMRC requirements. Approval will be effective when the Approval Agreement is signed and received by FMRC.

ORIGINAL DATA: Test Notebook No. 90-488


ATTACHMENTS Appendix I - Documentation list
System Component (Form 6592 I)
"Specifications for Installing Protectowire
Line Heat and Fire Detector" (Form 2053C)

EXAMINATION AND TESTS BY: M. E. Brown, Jr.

REPORT BY:


M. E. Brown, Jr.
Project Engineer
Systems Section

REVIEWED BY:


J. L. Abbott, Manager
Systems Section

II DESCRIPTION

2.1 The EPC cable is a line type heat detector comprised of two actuators encased in a heat sensitive material. The actuators are twisted together to impose a spring pressure between them. The actuators are wrapped in a protective Mylar film and the entire cable is PVC jacketed. At its rated temperature, the heat sensitive coating on the actuating conductors softens resulting in the conductors coming into electrical contact with each other. The principle of operation and installation requirements are further described in the attached literature.

2.2 The EPC is available in three fixed temperatures: regular, 155°F (68°C); intermediate, 190°F (88°C); high test 280°F (138°C). The cable is color coded as follows: regular (red), intermediate (white), and high test (blue). All cables are rated for 30Vac, 42Vdc.

III MARKING

Each cable has the manufacturer's name, type of device, Factory Mutual Research Approval mark, cable type, and fixed temperature rating printed on the outer jacket. The marking is repeated every 24 inches (61cm).

IV TESTS AND EXAMINATIONS

4.1 Tests were conducted at Factory Mutual Research Corporation (FMRC) in Norwood, MA and W. Glocester, RI on representative samples of the equipment covered by this report. All samples were compared with appropriate drawings and component information supplied by the manufacturer and found to meet FMRC requirements.

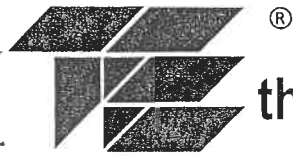
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4.2.1 Directional Sensitivity - Samples of the detector cable were examined and found to have no directional sensitivity. The sensing element is symmetrical about the horizontal axes. There is no baffling or other deformation which would deflect convective air currents.

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4.3 Dielectric Tests - A test voltage of 500 volts rms was applied for one minute between the conductors and the outer jacket. No arcing, dielectric breakdown or leakage current was observed during or at the end of these tests.



thermostick elettrotecnica srl

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e-mail: info@thermostick.com
Web: www.thermostick.com

Paderno Dugnano, 30/07/08

VA/pm

SPETT.LE
NOTIFIER ITALIA SRL
VIA GRANDI 22
20097 S. DONATO MILANESE MI

CERTIFICATO DI CONFORMITA'
(EN 10204)

Certifichiamo la conformità all'ordine della nostra fornitura di cavo termosensibile PROTECTOWIRE, certificato per applicazioni interno/esterno (indoor/outdoor).
Alleghiamo inoltre la relativa certificazione UL/FM

ORDINE : N. 81672 DEL 22/07/08
NS. COMMESSA: N. 08/00700
TIPO CAVO: PHSC-190 EPC 88°C
QUANTITA': MT. 100 – lotto n.08/0004
D.D.T.: N. 00818 DEL 30/07/08

Il cavo è stato da noi testato e i conduttori non sono in corto circuito.

THERMOSTICK ELETTROTECNICA



NOT to be distributed outside the FACTORY MUTUAL SYSTEM, except by CLIENT.

APPROVAL REPORT

**TYPE EPC
LINEAR HEAT DETECTION CABLE
FOR FIRE ALARM SIGNALING SYSTEMS**

Prepared For:

**The Protectowire Company
P. O. Box A
Hanover, MA 02339**

**J.I. 0T0A9.AY
(3210)
October 3, 1990**



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1151 Boston-Providence Turnpike
P.O. Box 9102
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RECEIVED OCT 19 1990



Factory Mutual Research

1151 Boston-Providence Turnpike
P.O. Box 9102
Norwood, Massachusetts 02062
Telephone (617) 762-4300
Telex 92-4415

October 18, 1990

The Protectowire Company
P. O. Box A
Hanover, MA 02339

Attn: Mr. William Doherty, Vice President of Engineering

Subject: Approval Examination of Type EPC Linear Heat Detection Cable
Ref. FMRC J.I. OTOA9.AY - Correction

Gentlemen:

Thank you for pointing out the errors in section 1.2 our report. This letter confirms that description of the Type WFR was incorrect and that the description of your "standard construction" cable was omitted. Section 1.2 has been revised as follows:

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Mayo E. Brown, Jr.
Asst. Manager
Systems Section

cc: TIC 3210 Class File
TIC Serial File



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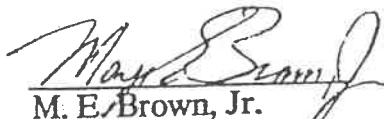
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REPORT BY:


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 Project Engineer
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REVIEWED BY:


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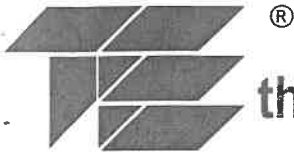
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e-mail: info@thermostick.com
Web: www.thermostick.com

Paderno Dugnano, 30/07/08

VA/pm

SPETT.LE
NOTIFIER ITALIA SRL
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CERTIFICATO DI CONFORMITA' (EN 10204)

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NS. COMMESSA: N. 08/00700
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QUANTITA': MT. 100 – lotto n.08/0004
D.D.T.: N. 00818 DEL 30/07/08

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THERMOSTICK ELETTROTECNICA

IRIDE Servizi Aggiornamento
documentale

N. 742

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Project Engineer
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Printed in U. S. A.
200,33-CHL 48M 6-45

ALVAN SMALL, PRESIDENT
C. R. WELBORN, SECRETARY
H. F. DUNCAN, TREASURER

FOUNDED 1894

CHICAGO, 207 E. OHIO ST.
NEW YORK, 181 SIXTH AVE.
SAN FRANCISCO,
500 SANSOME ST.

Underwriters' Laboratories, Inc.

For Service - Not for Profit

SPONSORED BY

National Board of Fire Underwriters

207 EAST OHIO STREET, CHICAGO 11

Signal 480
Application No. 4501501
February 21, 1946

REPORT

on

FIRE-DETECTING WIRE

Protectowire Company
Hanover, Mass.

D E S C R I P T I O NPRODUCT COVERED:

USL, CNL protectowire fire-detecting wire, types EPC, EPN, *and EPR in the ordinary (155°F), intermediate (190°F), high (280°F) and extra high (356°F) rating.

GENERAL CHARACTER:

Protectowire is a heat-sensitive cable composed of two conductors, each coated with a thermoplastic. The conductors are assembled in spiral windings and are wrapped with two layers of cellophane tape over which a covering of conventional cotton braid is woven and finally lacquered.

*The EPR type cable is similar to the EPC and EPN Cable except the EPR cable is provided with an outlet jacket constructed from extruded polypropylene rubber.

The wire is ordinarily furnished in coils of any footage up to 500 ft, and in the ordinary, intermediate and high temperature ratings.

CNL indicates investigation to Canadian Standard CAN/ULC-S530-M91.

CONSTRUCTION DETAILS:

Conductors - Spring or music wire.

Conductor Insulation Combining with Thermo-Responsive Function - Ethyl cellulose with an appropriate plasticizer to permit temperature response.

Wrapping - Moisture and flame resisting cellophane tape.

Braid - Conventional cotton braid tightly applied over cellophane tape wrapping. Exterior surfaces coated with lacquer.

S P E C I F I C A T I O N S

The wire should be adequately protected from abusive treatment while in storage or in the process of manufacture.

No product intended for shipment should show indications of injurious abrasions, kinks incidental to sharp bends or the like, nicks or battered areas.

MATERIALS AND DIMENSIONS:

Conductors - Spring steel (music wire, either plated or bright), 0.035 in. in diameter. Limits 0.034 to 0.037 in. Surface of conductors should show no rust or foreign scale coatings.

Thermoplastic Insulation on Conductors - Conductors to be individually coated with an ethyl cellulose compound, an appropriate plasticizer being added to produce proper thermo responsiveness.

Coatings to be uniform in thickness and continuous on each conductor and be from 0.0065 to 0.0085 in. in thickness.

Conductor Wrapping - Moisture and flame resistant "Cellophane" 3/8 in. wide tape spirally wrapped at 1.8 in. pitch (approximately).

Braid - Conventional cotton braid tightly applied over cellophane tape wrapping. Exterior surfaces coated with lacquer. Covering to be complete and continuous.

Packaging - All wire to be supplied in coils of not less than 10 in. diameter suitably wrapped and prepared for shipment.

Marking - The braid of the ordinary degree rating is a solid red, brown, or white-colored. Wire of the intermediate rating is identified by solid red with two white tracers, solid white with single brown tracer or solid brown with single white tracer. Wire of the high rating is identified by solid red with brown tracer.

Refer to the installation manual for ratings and required ambient temperatures. For the Types EPC and EPN heat-sensitive cable, the following ambient temperature ranges are: rated 155°F wire up to 100°F, rated 190°F wire - to 150°F, rated 280°F wire and rated 356°F wire - to 221°F. An installation manual is provided with each wire.

The required marking for the cotton braid construction appears on a durable moist resistant tag attached to each coil by a 3/8 in. wide piece of cotton braid. The tag is spun-bound olefin with a metal eyelet welded to the tag. The tag is manufactured by Dennison, Part No. S1-11-422. The approximate dimensions are 2 by 3-1/4 by 1-5/8 in. See ILL. 1 for the exact marking. The date code should be the day, month, and year.

QUARTERLY TESTS TO BE CONDUCTED BY THE FIELD REPRESENTATIVE:

Operating Temperature - Sections of wire are to be suspended in a water bath, the temperature of which gradually increases until the samples operate. Each sample to be connected to a suitable power source rated 30 V rms, 42.4 V dc and means of indicating contact of the conductors upon operation such as light or buzzer. The temperatures of the bath to be controlled to a rise of 1°F per min after attaining 140 and 170°F for the ordinary and intermediate degree ratings, respectively.

The bath liquid should be stirred throughout the test and the temperature should be measured by a reasonably accurate thermometer calibrated for shallow immersion.

Limitations - The samples under test should operate in the following ranges:

COTTON BRAID

	<u>Rating</u>	<u>Limits</u>		<u>Color</u>	
		<u>Minimum</u>	<u>Maximum</u>		
Water Bath	Ordinary	155	165	White	
Water Bath	Intermediate	190	205	White/Brown	
Oil Bath	High	280	300	Red/Brown	
* <u>Types EPC, EPN, and EPR Limits</u>					
				<u>EPN</u>	<u>EPC</u>
Water Bath	Ordinary	155	165	Black	Red
Water Bath	Intermediate	190	205	Black	White
Oil Bath	High	280	300	Black	Blue
Oil Bath	Extra High	356	376	Black	Lt. Blue or Red

Dielectric Tests - Tests should be conducted on all of the products by the manufacturer.

All of the products should be subjected to a potential of 1250 V ac for 1 min without breakdown applied as follows:

- A. Between conductors (separate conductors at end for 6 in.).
- B. Between the conductors tied together and aluminum foil wrapped around the conductor assembly except for 6 in. at end.

SAMPLES FOR ANNUAL INSPECTION (NORTHBROOK OFFICE):

The field representative shall select one 25 ft length sample of each temperature rating from material that has been produced since the previous inspection. These samples should be properly labeled for identification, well packed and shipped to the Casualty and Chemical Hazards Department, Northbrook Office, without delay.

This material is to be used for countercheck tests and should be representative of the commercial product in all essential details.

CASUALTY AND CHEMICAL HAZARDS DEPARTMENT TESTS (ANNUAL):

1. Detailed Examination - An examination shall be made of each rating. The construction shall be in conformity with the requirements under Material and Dimensions.
2. Operating Temperature - Five 2 ft lengths of each rating shall be tested in a water bath. See Operating Temperature Test for the test description and operating limits.
3. Dielectric Strength Test - Five 3 ft samples of each rating shall be subjected to a 1250 V ac potential applied as follows:
 - A. Between conductors. (Separate conductors at end for 6 in.).
 - B. Between the conductors tied together and aluminum foil wrapped around the conductor assembly, except for 6 in. at each end.
4. Qualitative Infrared Analysis - Infrared analysis shall be conducted on the clear coating (ethyl cellulose with plasticizer) of each temperature rating. The spectrums obtained shall indicate the original investigation of this material dated January 8, 1980 for ordinary degree rating, January 9, 1980 for intermediate degree rating and January 10, 1980 for high degree rating.

MANUFACTURER'S TEST PROGRAM:

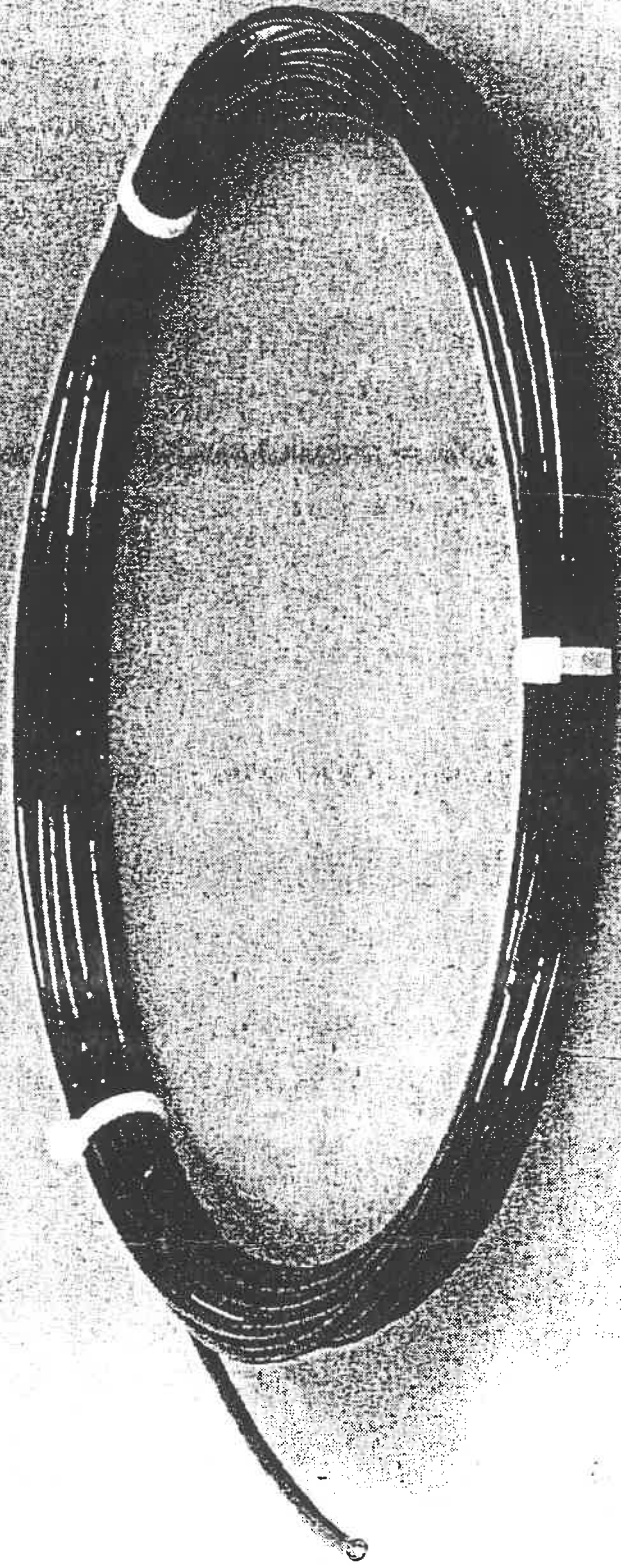
GENERAL

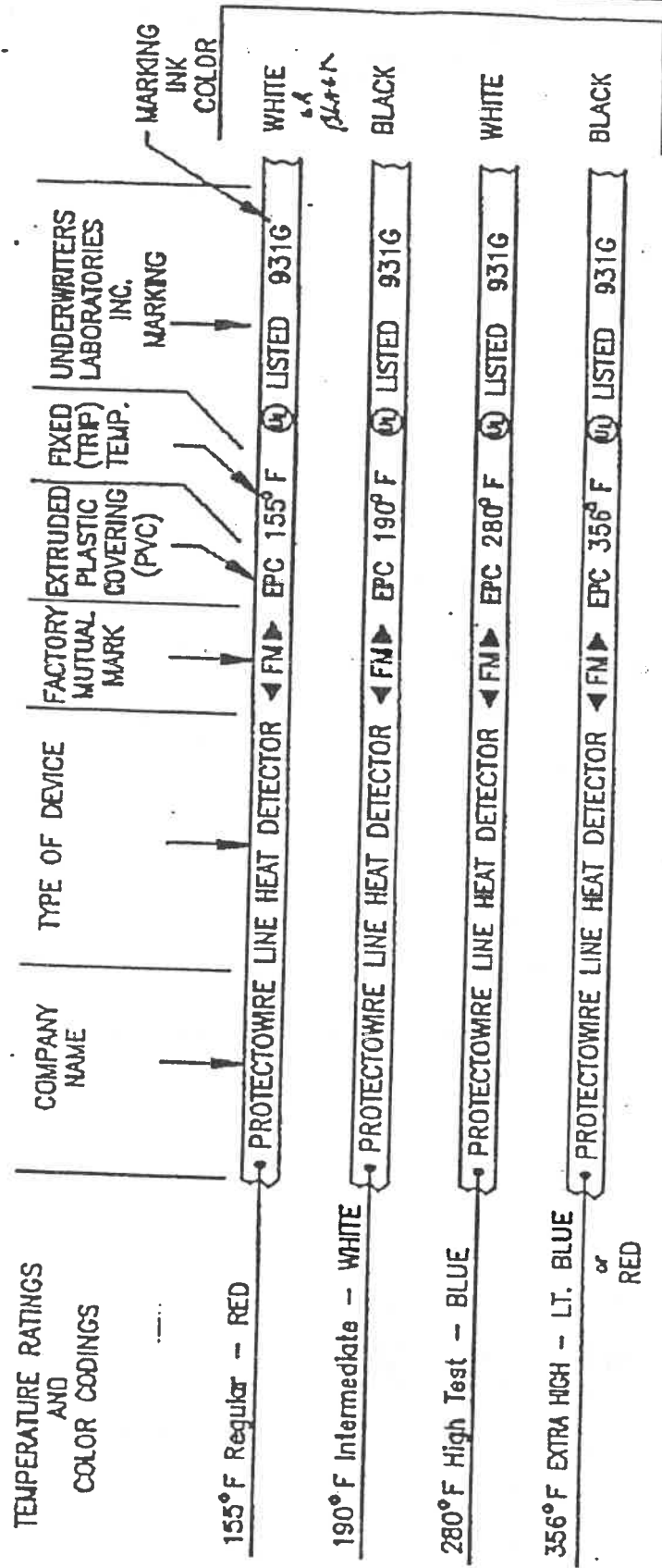
To assure compliance with these requirements in production, the manufacturer shall provide the necessary production control inspection and tests. The program shall include at least the operating temperature test. A record of accepted detectors and the detector serial number or equivalent is to be maintained.

OPERATING TEMPERATURE TEST

A minimum of three 3 ft long samples from each production run from each "drum" of insulation material shall be subjected to the test to determine response to temperature. The samples shall be immersed in a water reservoir or tank and the heat source used to increase the temperature of the water shall be an electric range or equivalent. The temperature shall be increased as specified under the operating temperature test conducted by the field representative during the quarterly inspection. The measured values shall be within limits specified under the same test.

KK/PS:ash
PC LBRY:lam



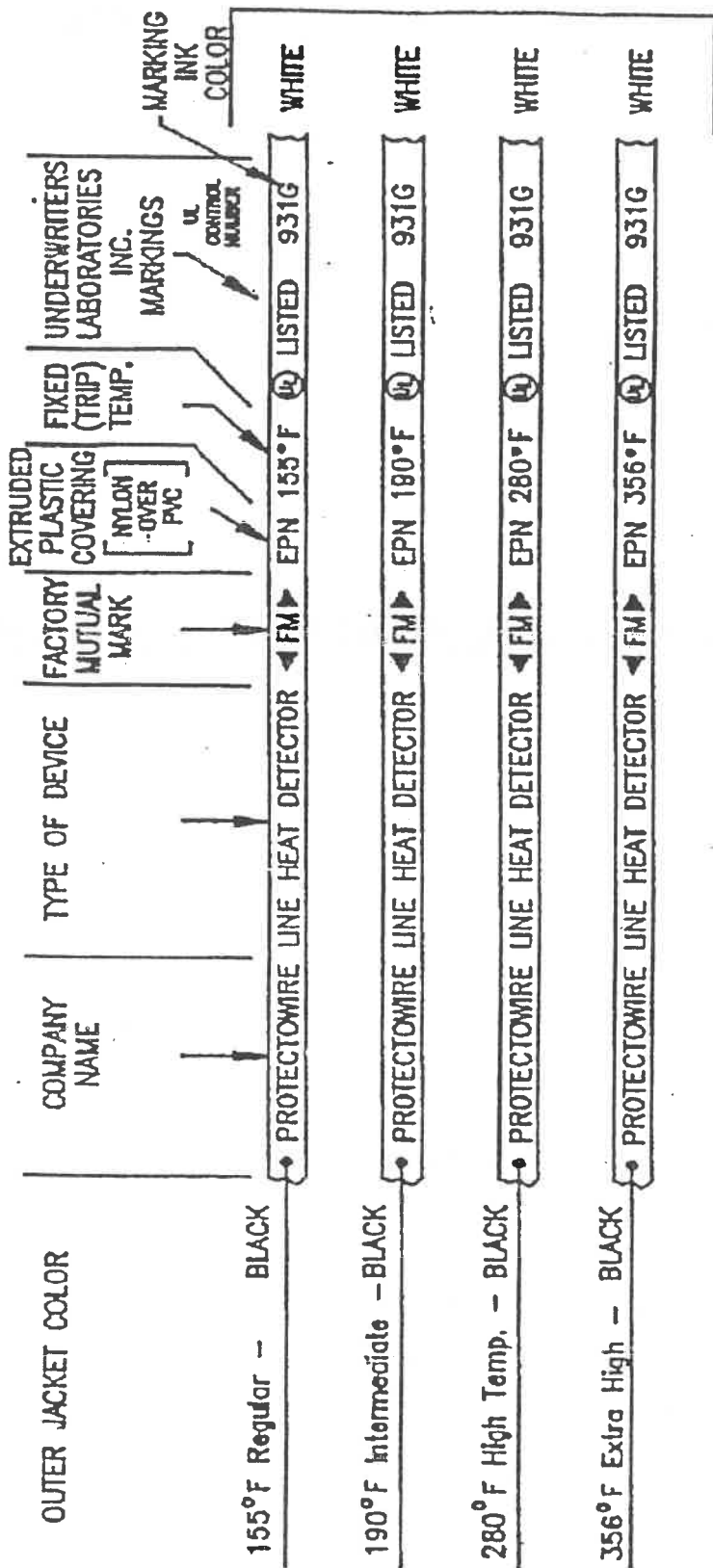


LETTERING SIZE 0.062" HIGH MIN.
 MARKINGS TO REPEAT EVERY 24" MIN.

PROTECTOWIRE	
PROTECTOWIRE LINE HEAT DETECTOR TYPE-EPC-OUTLET JACKET MARKING	
A	9/29/91 SIZE WAS 0.093" DWN N.F.D.
B	6/4/92 ADD DL. 14. TEMP. DATE 9-10-90
C	5/7/92 ADD DL. MARKING APPO <i>W. J. ...</i>

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TW PROTECTOWIRE CO. INC. DWG NO. | REV.




LETTERING SIZE 0.062" HIGH MIN.
 MARKINGS TO REPEAT EVERY 18" MAX.

PROTECTOWIRE			
PROTECTOWIRE LINE HEAT DETECTOR TYPE-EPN-OUTER JACKET MARKINGS			
A	DATE	DWN	W.F.D.
B	DATE	DATE	4-2-92
		APPO	W.F.D.
		THE PROTECTOWIRE CO. INC. DWG NO	
		REV	

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 ILL. 2

IRIDE SERVIZI Aggiornamento
documentale

N. 742

	PROTECTOWIRE		DO NOT PAINT
	LINE TYPE HEAT DETECTOR		
	FIXED TEMP.	° F.	
	30V RMS 42.4VDC AT 1A MAX.		
	MAX. ROOM TEMP.	° F.	
DATE			

TYVEK TAG


MAT'L: SPUN-BONDED OLEFIN W/METAL EYELET

MFR: DENNISON

PART NO: SI-11-442

SIZE: #2 - 3 1/4 * 1 5/8

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ILL. 1

DWN <u>M/A</u>	 PROTECTOWIRE			
DATE <u>9-22-83</u>				
CHKD	CABLE TAG			
APPD				
TOL	The PROTECTOWIRE Co. HANOVER, MA 02339	SCALE SHT	DWG NO <u>L-1000</u>	REV <u>A</u>