

ATEX – Test Certificate

- Directive 94 / 9 / EC -

Equipment intended for use
in explosion hazardous areas

Number: TURCK Ex-06007M X

Device: Relay Coupler Type MC73-..1Ex.-R...
MC73-..2Ex.-R...
MK73R111Ex...
MK73R112Ex...
MK73R222Ex...

Manufacturer: Hans Turck GmbH & Co. KG

Address: Witzlebenstr. 7 D- 45472 Mülheim an der Ruhr

Hans Turck GmbH & Co. KG hereby certify that essential health and safety requirements of article 9 of the Directive 94/9/EC are fulfilled by compliance with

EN 60079-0: 2004 EN 60079-15: 2005

If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

The examination and test results are recorded in the confidential test and assessment report 06007M-G.

The marking of the equipment shall include the following:

 II 3 G Ex nA nC [nL] IIC/IIB T4

Hans Turck GmbH & Co. KG

HANS TURCK GmbH & CoKG
Witzlebenstr. 7, 45472 Mülheim an der Ruhr
E-Mail: turckrhn@mail.turck-globe.de
Internet: www.turck.com

Mülheim, dated 2006-01-12

Authorized representative (p.p. W. Stoll)

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Annex to

ATEX – Test Certificate No. TURCK Ex-06007M X

Description of the device

Relay couplers of the type MC73-...Ex.-R... (eurocard) and MK73R...Ex... (terminal box) are associated electrical apparatus for installation outside of the explosion hazardous area resp. an apparatus for use in Zone 2 explosion hazardous areas. It is used for the transmission of binary signals from non explosion hazardous area into the explosion hazardous area as well as for the safe galvanic separation of the non intrinsically safe resp. non energy limited circuits and the intrinsically safe resp. energy limited circuits.

Permitted range of the ambient temperature -25°C to +60°C

Relay coupler type MC73-..1Ex.-R... (4-channels)

Control circuits (Terminals zd6, zd8, zd10, zd12)	non energy limited ≤ 30 V d. c. resp. ≤ 30 V a. c.
Contact circuits (change-over) (Terminals zbd20, zbd24, zbd28, zbd32)	energy limited circuits Ex nL IIC/IIB
	U _i ≤ 28 V d. c.
	I _i ≤ 240 mA
	P _i ≤ 7 W
	C _i negligible
	L _i negligible

Relay coupler type MC73-..2Ex.-R... (4-channels)

Control circuits (Terminals zd6, zd8, zd10, zd12)	non energy limited ≤ 30 V d. c. resp. ≤ 30 V a. c.
Contact circuits (normally open) (Terminals zd20, zd24, zd28, zd32)	energy limited circuits Ex nL IIC/IIB
	U _i ≤ 45 V d. c.
	I _i ≤ 500 mA
	P _i ≤ 10 W
	C _i negligible
	L _i negligible

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Relay coupler type MC73R111Ex... (1- channel)

Control circuit
(Terminal 7 and 8) non energy limited
 $\leq 30 \text{ V d. c. resp. } \leq 30 \text{ V a. c.}$

Contact circuits (change-over)
(Terminal 1...4) energy limited circuit Ex nL IIC/IIB
 $U_i \leq 28 \text{ V d. c.}$
 $I_i \leq 240 \text{ mA}$
 $P_i \leq 7 \text{ W}$
 C_i negligible
 L_i negligible

Relay coupler type MC73R112Ex... (1- channel)

Control circuit
(Terminal 7 and 8) non energy limited
 $\leq 30 \text{ V d. c. resp. } \leq 30 \text{ V a. c.}$

Contact circuit (normally open)
(Terminal 1 and 2) energy limited circuit Ex nL IIC/IIB
 $U_i \leq 45 \text{ V d. c.}$
 $I_i \leq 200 \text{ mA}$
 $P_i \leq 10 \text{ W}$
 C_i negligible
 L_i negligible

Relay coupler type MC73R222Ex... (2- channels)

Control circuits
(Terminals 5, 6 and 7, 8) non energy limited
 $\leq 30 \text{ V d. c. resp. } \leq 30 \text{ V a. c.}$

Contact circuits (normally open)
(Terminals 3, 4 and 1, 2) energy limited circuit Ex nL IIC/IIB
 $U_i \leq 45 \text{ V d. c.}$
 $I_i \leq 200 \text{ mA}$
 $P_i \leq 10 \text{ W}$
 C_i negligible
 L_i negligible

Control circuits and contact circuits are safely galvanically separated from the non energy limited circuits up to a peak crest value of the voltage of 375V. Contact circuits are galvanically isolated with each other up to maximum 90V.

Internal test report no. 06007M-G

Special conditions for safe use

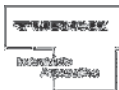
- Relay couplers of the type MC73-...Ex.-R... (eurocard) and MK73R...Ex... (terminal box) have to be installed in a suitable housing according to EN 60079-15 in such a way, that a degree of protection of at least IP 54 according to EN 60529 is reached.
- The connecting and disconnecting of energised non energy limited circuits is only permitted if no explosion hazardous atmosphere exists.
- For all control circuits arrangements have to be taken externally, that the rated voltage is exceeded not more than 40% by transient disturbances.

Essential health and safety requirements

no additional requirements

Konformitätserklärung Declaration of Conformity

Nr. 3110-3 M



Diese Konformitätserklärung entspricht der Europäischen Norm EN 45014 "Allgemeine Kriterien für Konformitätserklärungen von Anbietern". Die Grundlage der Kriterien sind internationale Dokumente, insbesondere ISO/IEC Leitfaden 22, 1982: "Information on manufacturer's declaration of conformity with standards or other technical specifications".

This "Declaration of Conformity" complies with the European Standard EN 45014 "General criteria for a supplier's declaration of conformity". These criteria are based on the relevant international documentation, particularly the ISO/IEC Guide 22, 1982: "Information on the manufacturer's declaration of conformity with standards or other technical specifications".

Wir/ We **HANS TURCK GMBH & CO KG**
WITZLEBENSTR. 7, D - 45472 MÜLHEIM A.D. RUHR

erklären in alleiniger Verantwortung, dass die Produkte
declare under our sole responsibility that the products

Koppelgeräte Typenreihe MC73-..1Ex.-R... ; MC73-..2Ex.-R... ; MK73R111Ex... ;
MK73R112Ex... ; MK73R222Ex... ; IM73-**Ex.-R/24VUC

auf die sich die Erklärung bezieht, mit den folgenden Normen übereinstimmen
to which this declaration relates are in conformity with the following standards

EN 61326:2006

und wo anwendbar
and where applicable

EN 60079-0:2006 EN 60079-11:2007 EN 60079-26:2004 EN 60079-15:2005

Gemäß den Bestimmungen der Richtlinie (falls zutreffend)
Following the provisions of Directive (if applicable)

EMV - Richtlinie	/ EMC Directive	2004 / 108 / EG	15. Dez. 2004
Richtlinie ATEX 100a	/ Directive ATEX 100a	94 / 9 / EG	23. März 1994

Weitere Normen
additional standards

Aussteller der EG-Baumusterbescheinigung:

DEKRA EXAM GmbH
Dinnendahlstraße 9, D-44809 Bochum
Kenn-Nr. 0158, Registriernummer: BVS 03 ATEX E 335 Kennzeichnung  II (1) GD

Aussteller der ATEX Prüfbescheinigung:

Hans Turck GmbH & Co KG, D-45472 Mülheim a.d. Ruhr
Registriernummer: TURCK Ex-06007M X Kennzeichnung  II 3 G

Mülheim, den 16.07.08


(i.V. W. Stoll)

Ort und Datum der Ausstellung /
Place and date of issue

Name und Unterschrift des Befugten /
Name and signature of authorized person

TURCK

Industrielle Automation

1. SUPPLEMENT

- Directive 94 / 9 / EC -

to ATEX – Test Certificate TURCK Ex-06007M X

Device:	Relay Coupler Type	MK73R111Ex...
	MC73-..1Ex.-R...	MK73R112Ex...
	MC73-..2Ex.-R...	MK73R222Ex...

Marking:  II 3 G Ex nA nC [nL] IIC/IIB T4

Manufacturer: Hans Turck GmbH & Co. KG

Address: Witzlebenstr. 7 D- 45472 Mülheim an der Ruhr

Description of supplements and modifications

Relay coupler of the IM73-**Ex-R/24VUC types have been added to the MK and MC types.
The permissible ambient temperature of the IM73-**Ex-R/24VUC types is -25°C to +70°C and range of the MK and MC types is 25°C to +60°C.

The electrical data, the special conditions and other specifications of the Turck ATEX – Test Certificate apply without changes also for this 1st supplement.

The IM73-**Ex-R/24VUC, MK und MC types fulfil the Essential Health and Safety Requirements of the Directive 94/9/EC by accordance with

EN 60079-0:2006	General requirements
EN 60079-15:2005	Type of protection „n“

The examination and the test results of the IM73-**Ex-R/24VUC types are recorded in the confidential test and assessment report 06007-1M-G.

The marking of the IM73-**Ex-R/24VUC types shall include the following

 II 3 G Ex nA nC [nL] IIC/IIB T4

Hans Turck GmbH & Co. KG

HANS TURCK GmbH & Co. KG
Witzlebenstr. 7, D-45472 Mülheim a.d. Ruhr
E-Mail: turck@mail.turck-globe.de
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Mülheim, dated 2008-07-02

Authorized representative (p.p. W. Stoll)

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The previous electrical data continue to exist.

Because of IM73-**Ex-R/24VUC types the following parameters are valid:

Permitted range of ambient temperature	-25°C to +70°C
Control circuits (pluggable screwing terminal) (Terminals 7, 8 and 10, 11)	non energy limited ≤ 30 V d. c. resp. ≤ 30 V a. c.
Contact circuits (pluggable screwing terminal) (Terminals 4, 5 and 6 change-over circuit 1) (Terminals 1, 2 and 3 change-over circuit 2)	energy limited circuits Ex nL IIC/IIB U _i ≤ 28 V DC I _i ≤ 240 mA P _i ≤ 7 W C _i negligible L _i negligible

Contact circuits are safety galvanically separated from the non energy limited circuits up to a peak crest value of the voltage of 375V. Contact circuits are galvanically isolated with each other up to maximum 60V.

Special conditions for safe use

- Relay couplers of the IM73-**Ex-R/24VUC types have to be installed in a suitable housing according to EN 60079-15 in such a way, that a degree of protection of at least IP 54 according to EN 60529 is reached.
- The connecting and disconnecting of energised non energy limited circuits is only permitted if no explosion hazardous atmosphere exists.
- For all control circuits arrangements have to be taken externally, that the rated voltage is exceeded not more than 40% by transient disturbances.