

EC DECLARATION OF CONFORMITY
According to EMC Directive 89/336/EEC

Koyo Electronics Industries Co., Ltd.

(Name of Company)

1-171 Tenjin-cho Kodaira, Tokyo, JAPAN

(Address)

Rotary Encoder

(Kind of Product)

TRD-N/NH Series

(Type Designation)

JAPAN

(Country of Origin)

This declaration conforms to the following standard.

Generic standard EMC: EMS EN50082-2 (1995)

/ENV50140, ENV50141, ENV50204

EN61000-4-4, EN61000-4-8

Date to begin affixing CE Marking: August 20, 1999

We, Koyo Electronics Industries Co., Ltd. declare under our sole responsibility that the product to which this declaration relates is in conformity with the standard listed.

Note: This declaration will become invalid if any modification or repair is performed to the encoders without Koyo's permission.

Tokyo/ April24, 2000
(Place and date issued)

Y. Kishi
Yoshio Kishi, Manager of Encoder Business Division.
(Name and signature as well as position of declarant)

Koyo Ref. No.EA-0046-1

1). TRD-N/NH Series

(a). Sample model: TRD-N500-RZWD

The same circuit is used for all types of the TRD-N/NH series, although disk varies with encoder resolution.

Pulse/revolution	Type	Type	Type
10	TRD-N10-RZW	TRD-N10-RZWD	TRD-N10-RZWA
30	TRD-N30-RZW	TRD-N30-RZWD	TRD-N30-RZWA
40	TRD-N40-RZW	TRD-N40-RZWD	TRD-N40-RZWA
50	TRD-N50-RZW	TRD-N50-RZWD	TRD-N50-RZWA
60	TRD-N60-RZW	TRD-N60-RZWD	TRD-N60-RZWA
100	TRD-N100-RZW	TRD-N100-RZWD	TRD-N100-RZWA
120	TRD-N120-RZW	TRD-N120-RZWD	TRD-N120-RZWA
200	TRD-N200-RZW	TRD-N200-RZWD	TRD-N200-RZWA
240	TRD-N240-RZW	TRD-N240-RZWD	TRD-N240-RZWA
250	TRD-N250-RZW	TRD-N250-RZWD	TRD-N250-RZWA
300	TRD-N300-RZW	TRD-N300-RZWD	TRD-N300-RZWA
360	TRD-N360-RZW	TRD-N360-RZWD	TRD-N360-RZWA
400	TRD-N400-RZW	TRD-N400-RZWD	TRD-N400-RZWA
480	TRD-N480-RZW	TRD-N480-RZWD	TRD-N480-RZWA
500	TRD-N500-RZW	TRD-N500-RZWD	TRD-N500-RZWA

Hollow-shaft: Directly connected to the other shaft without coupling.

Pulse/revolution	Type	Type	Type
10	TRD-NH10-RZW	TRD-NH10-RZWD	TRD-NH10-RZWA
30	TRD-NH30-RZW	TRD-NH30-RZWD	TRD-NH30-RZWA
40	TRD-NH40-RZW	TRD-NH40-RZWD	TRD-NH40-RZWA
50	TRD-NH50-RZW	TRD-NH50-RZWD	TRD-NH50-RZWA
60	TRD-NH60-RZW	TRD-NH60-RZWD	TRD-NH60-RZWA
100	TRD-NH100-RZW	TRD-NH100-RZWD	TRD-NH100-RZWA
120	TRD-NH120-RZW	TRD-NH120-RZWD	TRD-NH120-RZWA
200	TRD-NH200-RZW	TRD-NH200-RZWD	TRD-NH200-RZWA
240	TRD-NH240-RZW	TRD-NH240-RZWD	TRD-NH240-RZWA
250	TRD-NH250-RZW	TRD-NH250-RZWD	TRD-NH250-RZWA
300	TRD-NH300-RZW	TRD-NH300-RZWD	TRD-NH300-RZWA
360	TRD-NH360-RZW	TRD-NH360-RZWD	TRD-NH360-RZWA
400	TRD-NH400-RZW	TRD-NH400-RZWD	TRD-NH400-RZWA
480	TRD-NH480-RZW	TRD-NH480-RZWD	TRD-NH480-RZWA
500	TRD-NH500-RZW	TRD-NH500-RZWD	TRD-NH500-RZWA

(b). Sample model: TRD-N2500-RZWD

The same circuit is used for all types of the TRD-N/NH series, although disk varies with encoder resolution.

Pulse/revolution	Type	Type	Type
600	TRD-N600-RZW	TRD-N600-RZWD	TRD-N600-RZWA
750	TRD-N750-RZW	TRD-N750-RZWD	TRD-N750-RZWA
1000	TRD-N1000-RZW	TRD-N1000-RZWD	TRD-N1000-RZWA
1024	TRD-N1024-RZW	TRD-N1024-RZWD	TRD-N1024-RZWA
1200	TRD-N1200-RZW	TRD-N1200-RZWD	TRD-N1200-RZWA
2000	TRD-N2000-RZW	TRD-N2000-RZWD	TRD-N2000-RZWA
2500	TRD-N2500-RZW	TRD-N2500-RZWD	TRD-N2500-RZWA

Hollow-shaft: Directly connected to the other shaft without coupling.

Pulse/revolution	Type	Type	Type
600	TRD-NH600-RZW	TRD-NH600-RZWD	TRD-NH600-RZWA
750	TRD-NH750-RZW	TRD-NH750-RZWD	TRD-NH750-RZWA
1000	TRD-NH1000-RZW	TRD-NH1000-RZWD	TRD-NH1000-RZWA
1024	TRD-NH1024-RZW	TRD-NH1024-RZWD	TRD-NH1024-RZWA
1200	TRD-NH1200-RZW	TRD-NH1200-RZWD	TRD-NH1200-RZWA
2000	TRD-NH2000-RZW	TRD-NH2000-RZWD	TRD-NH2000-RZWA
2500	TRD-NH2500-RZW	TRD-NH2500-RZWD	TRD-NH2500-RZWA

2). Applicability

The following tests were not carried out and the reason is described as bellow.

a. Electromagnetic compatibility- Generic immunity standard

Part 1 : Residential ,commercial and light industry EN50081-1

/Table 1 : Emission Enclosure

Table A.1 : Emission Signal ,control ,DC power input ,DC power output

This test is not carried out, because no noise sources such as oscillating and switch circuit exist in TRD-N/NH encoders.

b. EN50082-2 / Electrostatic discharge EN61000-4-2

This test is not carried out, because no operation switches and buttons will be touched by hands.

c. Low Voltage Directive 73/23/EEC

EN61010-1 (1993)

Because TRD-N/NH encoder are designed with supply voltage under 35V DC, the requirement of 75V DC or more is beyond application.

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TRD-N/NH-V Series

(Type Designation)

JAPAN

(Country of Origin)

This declaration conforms to the following standard.

Generic standard EMC

EN61000-6-2:2001

/EN61000-4-2:1995,A1:1998,A2:2001EN61000-4-3:1996,A1:1998,A2:2001

EN61000-4-4:1995,A1:2001EN61000-4-5:1995,A1:2001

EN61000-4-6:1996,A1:2001EN61000-4-8:1993,A1:2001

EN61000-4-11:1994,A1:2001

Date to begin affixing CE Marking: September 1, 2002

We, Koyo Electronics Industries Co., Ltd. declare under our sole responsibility that the product to which this declaration relates is in conformity with the standard listed.

Note: This declaration will become invalid if any modification or repair is performed to the encoders without Koyo's permission.

Tokyo/ September 1,2002

(Place and date issued)

Y. Kishi
Yoshio Kishi, Manager of Encoder Business Division.

(Name and signature as well as position of declaring)

Koyo Ref. No.EA-0064-0

1). TRD-N/NH-V Series

Sample model: TRD-N360-RZVWD

The same circuit is used for all types of the TRD-N/NH-V series, although disk varies with encoder resolution.

Sample model: TRD-N600-RZVWD

The same circuit is used for all types of the TRD-N/NH-V series, although disk varies with encoder resolution.

2). Applicability

The following tests were not carried out and the reason is described as bellow.

- a. Electromagnetic compatibility-Generic immunity standard
Part 1 : Residential ,commercial and light industry EN50081-2

This test is not carried out, because no noise sources such as oscillating and switch circuit exist in TRD- N/NH-V encoders.

- b. EN61000-6-2:1999 / Electrostatic discharge EN61000-4-2

This test is not carried out, because no operation switches and buttons will be touched by hands.