

# 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-GK 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/ April 24, 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-0045-1

1). TRD-GK Series

(a). Sample model: TRD-GK1000-RZD

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

(a-1) Conventional products

Pulse/revolution	Type	Pulse/revolution	Type
30	TRD-GK30-RZ	600	TRD-GK600-RZ
100	TRD-GK100-RZ	800	TRD-GK800-RZ
120	TRD-GK120-RZ	1000	TRD-GK1000-RZ
200	TRD-GK200-RZ	1200	TRD-GK1200-RZ
240	TRD-GK240-RZ	1500	TRD-GK1500-RZ
250	TRD-GK250-RZ	1800	TRD-GK1800-RZ
300	TRD-GK300-RZ	2000	TRD-GK2000-RZ
360	TRD-GK360-RZ	2500	TRD-GK2500-RZ
400	TRD-GK400-RZ		
500	TRD-GK500-RZ		

(a-2) Koyo Brand for oversea market

Pulse/revolution	Type	Pulse/revolution	Type
30	TRD-GK30-RZA	600	TRD-GK600-RZA
100	TRD-GK100-RZA	800	TRD-GK800-RZA
120	TRD-GK120-RZA	1000	TRD-GK1000-RZA
200	TRD-GK200-RZA	1200	TRD-GK1200-RZA
240	TRD-GK240-RZA	1500	TRD-GK1500-RZA
250	TRD-GK250-RZA	1800	TRD-GK1800-RZA
300	TRD-GK300-RZA	2000	TRD-GK2000-RZA
360	TRD-GK360-RZA	2500	TRD-GK2500-RZA
400	TRD-GK400-RZA		
500	TRD-GK500-RZA		

(a-3) Products of Original Equipment Manufacturer (OEM)

Pulse/revolution	Type	Pulse/revolution	Type
30	TRD-GK30-RZD	600	TRD-GK600-RZD
100	TRD-GK100-RZD	800	TRD-GK800-RZD
120	TRD-GK120-RZD	1000	TRD-GK1000-RZD
200	TRD-GK200-RZD	1200	TRD-GK1200-RZD
240	TRD-GK240-RZD	1500	TRD-GK1500-RZD
250	TRD-GK250-RZD	1800	TRD-GK1800-RZD
300	TRD-GK300-RZD	2000	TRD-GK2000-RZD
360	TRD-GK360-RZD	2500	TRD-GK2500-RZD
400	TRD-GK400-RZD		
500	TRD-GK500-RZD		

(b). Sample model: TRD-GK5000-RZD

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

(b-1) Conventional products

Pulse/revolution	Type
3600	TRD-GK3600-RZ
5000	TRD-GK5000-RZ

(b-2) Koyo Brand for oversea market

Pulse/revolution	Type
3600	TRD-GK3600-RZA
5000	TRD-GK5000-RZA

(b-3) Products of Original Equipment Manufacturer (OEM)

Pulse/revolution	Type
3600	TRD-GK3600-RZD
5000	TRD-GK5000-RZD

**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-GK 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-GK encoder are designed with supply voltage under 35V DC, the requirement of 75V DC or more is beyond application.