

# 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-S/SH\_V/VD 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: October29, 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)

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

Koyo Ref. No.EA-0048-1

1). TRD-S/SH\_V/VD Series

Sample model: TRD-SH2500VD

The same circuit is used for all types of the TRD-S/SH\_V/VD series, although disk varies with encoder resolution.

(a-1.) Conventional products

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-S100V	1000	TRD-S1000V
200	TRD-S200V	1024	TRD-S1024V
240	TRD-S240V	1200	TRD-S1200V
250	TRD-S250V	2000	TRD-S2000V
300	TRD-S300V	2500	TRD-S2500V
360	TRD-S360V		
400	TRD-S400V		
500	TRD-S500V		
600	TRD-S600V		
800	TRD-S800V		

(a-2.) Conventional products

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

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-SH100V	1000	TRD-SH1000V
200	TRD-SH200V	1024	TRD-SH1024V
240	TRD-SH240V	1200	TRD-SH1200V
250	TRD-SH250V	2000	TRD-SH2000V
300	TRD-SH300V	2500	TRD-SH2500V
360	TRD-SH360V		
400	TRD-SH400V		
500	TRD-SH500V		
600	TRD-SH600V		
800	TRD-SH800V		

(b-1.) Koyo Brand for oversea market

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-S100VA	1000	TRD-S1000VA
200	TRD-S200VA	1024	TRD-S1024VA
240	TRD-S240VA	1200	TRD-S1200VA
250	TRD-S250VA	2000	TRD-S2000VA
300	TRD-S300VA	2500	TRD-S2500VA
360	TRD-S360VA		
400	TRD-S400VA		
500	TRD-S500VA		
600	TRD-S600VA		
800	TRD-S800VA		

(b-2.) Koyo Brand for oversea market

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

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-SH100VA	1000	TRD-SH1000VA
200	TRD-SH200VA	1024	TRD-SH1024VA
240	TRD-SH240VA	1200	TRD-SH1200VA
250	TRD-SH250VA	2000	TRD-SH2000VA
300	TRD-SH300VA	2500	TRD-SH2500VA
360	TRD-SH360VA		
400	TRD-SH400VA		
500	TRD-SH500VA		
600	TRD-SH600VA		
800	TRD-SH800VA		

(c-1.) Products of Original Equipment Manufacturer (OEM)

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-S100VD	1000	TRD-S1000VD
200	TRD-S200VD	1024	TRD-S1024VD
240	TRD-S240VD	1200	TRD-S1200VD
250	TRD-S250VD	2000	TRD-S2000VD
300	TRD-S300VD	2500	TRD-S2500VD
360	TRD-S360VD		
400	TRD-S400VD		
500	TRD-S500VD		
600	TRD-S600VD		
800	TRD-S800VD		

(c-2.) Products of Original Equipment Manufacturer (OEM)

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

Pulse/revolution	Type	Pulse/revolution	Type
100	TRD-SH100VD	1000	TRD-SH1000VD
200	TRD-SH200VD	1024	TRD-SH1024VD
240	TRD-SH240VD	1200	TRD-SH1200VD
250	TRD-SH250VD	2000	TRD-SH2000VD
300	TRD-SH300VD	2500	TRD-SH2500VD
360	TRD-SH360VD		
400	TRD-SH400VD		
500	TRD-SH500VD		
600	TRD-SH600VD		
800	TRD-SH800VD		

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-S/SH\_V/VD 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-S/SH encoder are designed with supply voltage under

TRD-S/SH\_V/VD : 5.25V DC

the requirement of 75V DC or more is beyond application.