# General **Specifications**

### Model DSK Limit Alarm

**NTXUL** 

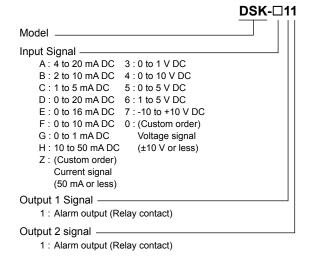
#### GS 77J05S21-01E

#### ■ General

The DSK is a nest-mounting type limit alarm that receives various DC current or DC voltage signals, compares them with internal setting values and outputs alarm contacts.

· Alarm action points can be set by front volume, and directions and contacts can be selected by the internal switch.

#### ■ Model and Suffix Codes



Power supply: 24 V DC±10%

# Ordering Information

Specify the following when ordering.

· Model and suffix codes: e.g. DSK-A11

### ■ Input/Output Specifications

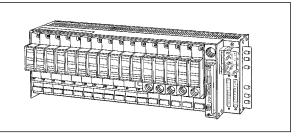
Input signal: DC current or DC voltage signal Input resistance:

DC current input	Input resistance	DC voltage input	Input resistance
4 to 20 mA	250 Ω	0 to 1 V	1 MΩ durning
2 to 10 mA	500 Ω	0 to 10 V	power on 100 kΩ during
1 to 5 mA	1 kΩ	0 to 5 V	power off
0 to 20 mA	250 Ω	1 to 5 V	
0 to 16 mA	250 Ω	-10 to 10 V	
0 to 10 mA	500 Ω		
0 to 1 mA	1 kΩ		
10 to 50 mA	100 Ω		

Maximum allowable input: Voltage input: Within ±30 V DC Current input: Within 22 to 70 mA DC Output signal type: Relay contact Alarm output: a or c contact, 2 points

Contact rating:

125 V AC/1 A, 220 V AC/0.5 A (resistance load) 30 V DC/1 A, 125 V DC/0.1 A (resistance load)



Alarm setting range: -5 to +105% (Hysteresis is fixed about 1 %.)

### ■ Standard Performance

Reproducibility of alarm action point: ±0.05% of span Insulation resistance: 100 MΩ or more at 500 V DC between input and output 1, input and power supply, input and output 2, output 2 and power supply, output 1 and output 2, and power supply and output2.

Withstand voltage: 1500 V AC/min. between input and output 1, input and power supply, input and output 2, output 2 and power supply, output 1 and output 2, and power supply and output2.

#### ■ Environmental Conditions

Operating temperature range: 0 to 50°C Operating humidity range:

5 to 90% RH (no condensation)

Power supply voltage: 24 V DC±10% (ripple content 5% p-p or less)

Effect of power supply voltage fluctuations: ±0.1% of span or less for the fluctuation within the operating range of power supply voltage specification.

Effect of ambient temperature change: ±0.2% of span or less for a temperature change of 10°C. Current consumption: 24 V DC 80 mA

#### Mounting and Dimensions

Mounting method: Nest-mounting (Signals and power supply are connected through back board and connector)

Connection method:

External wiring; connection to M4 screw terminals of the dedicated nest

Connection to I/O card; via dedicated cable (connector)

External dimensions: 130.6(H)×23.6(W)×126(D) mm Weight: Approx. 100 g

#### Standard Accessories

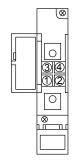
Tag number label: 1



### **■ Custom Order Specifications**

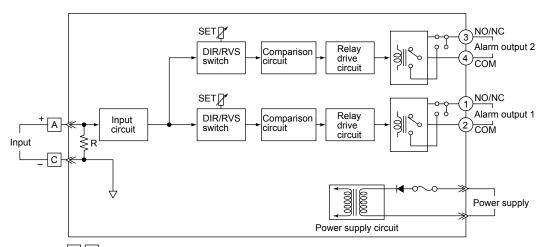
	Current signal	Voltage signal
Input range (DC)	0 to 50 mA	-10 to +10 V
Span (DC)	1 to 50 mA	1 to 20 V
Zero elevation	0 to 50%	-50 to 50%

### ■ Terminal Assignments



Terminal No.	Signal name
1	Alarm output 1 (NO/NC contact)
2	Alarm output 1 (COM)
3	Alarm output 2 (NO/NC contact)
4	Alarm output 2 (COM)

## **■ Block Diagram**



A C : Nest input-and-output terminal

(3) (4): Front terminal

R : Input resistance (when current inputs)

### **■ External Dimensions**

