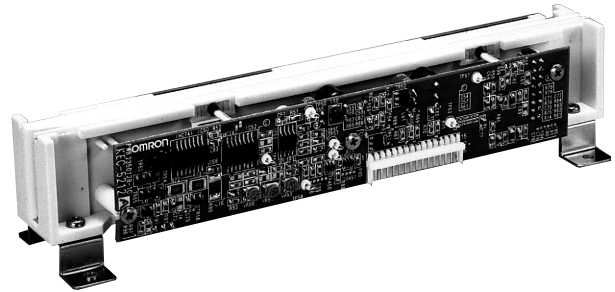


Low Profile Magnetic Card Reader/Writer for Economical Design

- Reads/writes in accordance with ISO standards
- Reads/writes tracks 1 or 3; read only track 2
- Encode and verify data in one swipe
- TTL-compatible interface



Ordering Information

Magnetic Tracks Supported (R, R/W)					IC Contact	Interface	Cover	Cable	Color	Part Number
1	2	3	Center	JIS II						
R/W	R	—	—	—	No	TTL	No	No	Ivory	3S4YR-HNW3R4-01
—	R	R/W	—	—	No	TTL	No	No	Ivory	3S4YR-HNW5R4-01

■ TYPICAL APPLICATIONS

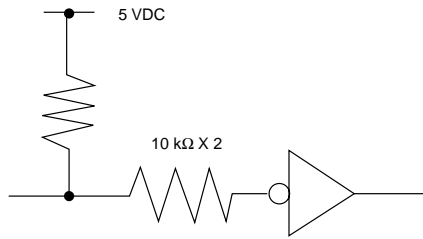
- Access Control
- Proprietary Cards
- ID Card Checkers
- Electronic Locks

Specifications

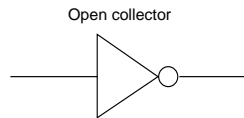
Part number		3S4YR-HNW
Recommended card type	Magnetic card	ISO 7810-7813
Recording method		FM decoding (F2F)
Card feeding speed	Read	10 to 120 cm/sec (4 to 47 in/sec)
	Write	10 to 80 cm/sec (4 to 32 in/sec)
Service life of magnetic head		300,000 passes min.
Operating power supply		5 VDC \pm 5%
Current consumption	Read	25 mA max.
	Write	500 mA max.
Mounting location		Indoors
Ambient temperature	Operation	-5° to 55°C (23° to 131°F) without condensation
	Storage	-20° to 65°C (-4° to 149°F)
Ambient humidity	Operation	10% to 90% RH without condensation
	Storage	10% to 95% RH without condensation
Vibration		10 to 150 Hz, 0.15 mm single amplitude, for 30 minutes in each of X, Y, and Z directions
Shock		200 m/sec ² (20 G) in each of X, Y, and Z directions
Dimensions		185L x 48W x 40H mm (7.28L x 1.89W x 1.57H in)
Weight		130 g (4.6 oz)

Engineering Data

INPUT CIRCUIT DIAGRAM



OUTPUT CIRCUIT DIAGRAM



I/O INFORMATION

3S4YR-HNW

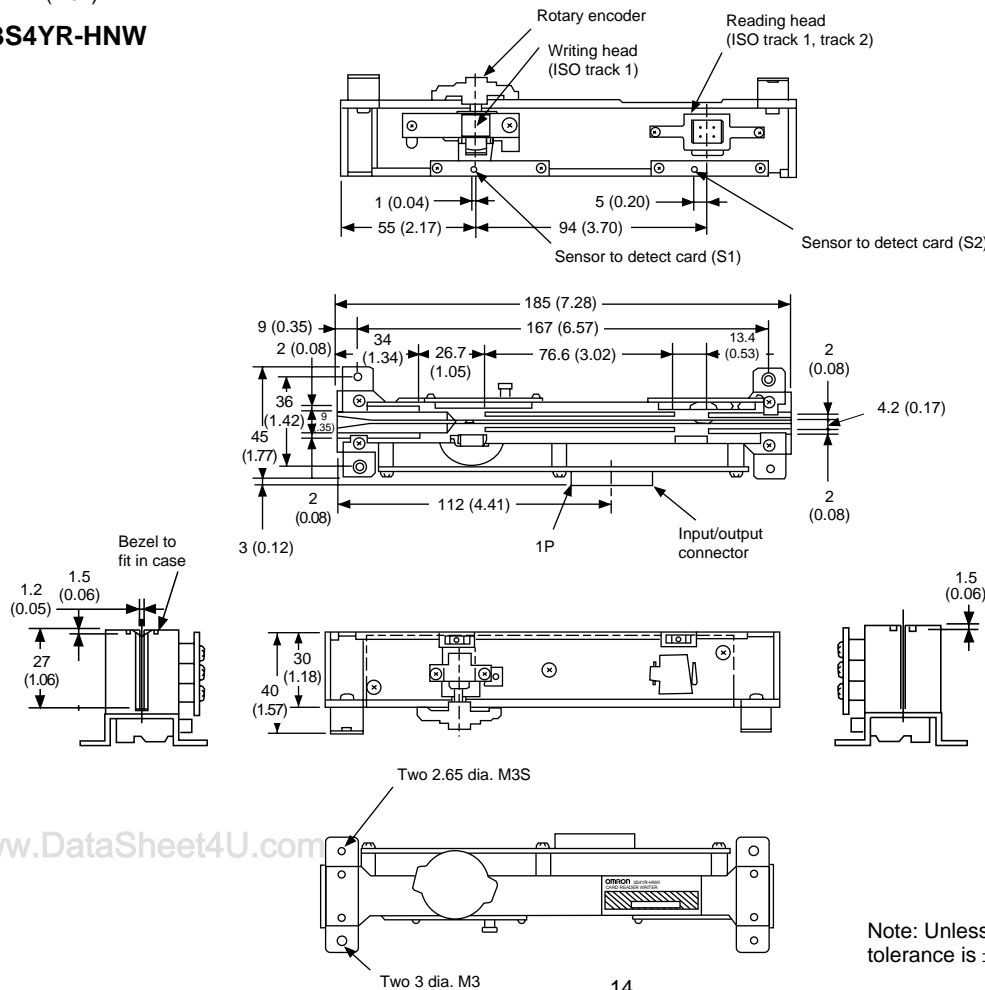
15-pin Japan AMP connector part number 1-173979-5.

Pin #	Signal	Input/Output	Description
1	$\overline{\text{CLS}}$	Output	Card load
2	$\overline{\text{RCP1}}$	Output	Read clock, track 1 or 3
3	$\overline{\text{RDP1}}$	Output	Read data, track 1 or 3
4	$\overline{\text{RCP2}}$	Output	Read clock, track 2
5	$\overline{\text{RDP2}}$	Output	Read data, track 2
6	$\overline{\text{WCP}}$	Input	Write clock pulse
7	$\overline{\text{WSC}}$	Input	Write STX code
8	$\overline{\text{S1}}$	Output	Card sensor write
9	$\overline{\text{S2}}$	Output	Card sensor read
10	$\overline{\text{WMD}}$	Input	Write mode
11	$\overline{\text{WDT}}$	Input	Write data
12	5VDC	—	—
13	5VDC	—	—
14	0V	—	—
15	0V	—	—

Dimensions

Unit: mm (inch)

3S4YR-HNW



Note: Unless otherwise specified, tolerance is ± 0.3 .

NOTE: DIMENSIONS ARE SHOWN IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

OMRON

OMRON ELECTRONICS, INC.

One East Commerce Drive
Schaumburg, IL 60173

1-800-55-OMRON

OMRON CANADA, INC.

885 Milner Avenue
Scarborough, Ontario M1B 5V8

416-286-6465