

Model Code / Additional Spec. Code (No entry if additional spec. code is not specified.)

VM-707B /ALY /NB1 /CS1 /CS2 /TRP /TB

Analysis Function	Non-incendive	Monitor Function	Analysis Function	Tropical spec.	I/O terminal block for
1	CSA C/US: Class I, Division 2, Groups A,B,C and D	Custom set up	Custom set up (When "ALY" is requested)		1 VM-761B instrument rack 2 VM-762B instrument rack

Specification

INPUT (VIBRATION/DISPLACEMENT)

Input points : 4points
Input impedance : Approx. 50kΩ
Measurable range : -20V~+20V

INPUT TRANSDUCER (VIBRATION/DISPLACEMENT)

Velocity vibration input : CV-88, CV-87, CV-86, Other velocity sensor
Acceleration vibration input : CA-302, CA-72, Other acceleration sensor

SYNCHRONIZED SIGNAL SOURCE

VM-741B : input via internal mother board.

OUTPUT

Indicators : OK LED (Green)
When channel is normal : ON, When alarming : Flashing

Monitor output : Input signal is output via buffer amplifier.
Location : BNC (Front) and connector (Back)
Output impedance : Approx. 100Ω (Max.5mA)

Recorder output : Voltage or current output proportional to measurement value.
Number of output points : 4 points.
Output range : 1 to 5V, 4 to 20mA,
0 to 5V, 0 to 10V
(Overall monitoring, Band-pass vibration monitoring)
I/O conversion accuracy : ±1% of F.S. at 25°C^{*1}
±2% of F.S. at 0°C to 65°C ^{*1}
(1X vibration tracking monitoring)
I/O conversion accuracy : ±3% of F.S. at 25°C^{*1}
±5% of F.S. at 0°C to 65°C ^{*1}
Max. load resistance: 600Ω (current mood)
Output impedance: Approx. 500Ω (voltage mood)
Insulation resistance: 10MΩ at 100VDC
Burnout function: Downscale 0%
Downscale 0mA / 0mV

Transducer power supply :
+24VDC±10% / 4mA (constant current)
-24VDC±10% / 25mA Max. ^{*2}

Note) ^{*2} 3 wire Velocity / Acceleration transducer power supply

Contact output :
Number of relay : 6 points (logic changeable)
Contact type : Dry contact (SPDT)
Energization method : Normally de-energized or
Normally energized field changeable.
Contact capacity : 250VAC/5A, 30VDC/5A

Output to analysis software
Dynamic data : Synchronous waveform, Asynchronous waveform
Static data : Amplitude (1X, 2X, nX (n=0.01 to 8.00),
Rotation speed

Refer to the specification sheet of
VM-773B infiSYS ANALYSIS VIEW.

Note) ^{*1} At calibrate frequency.

ALARM

Alarm set point : 2 points (DANGER-A, ALERT-A, DANGER-B,
ALERT-B), from 0 to 100% of monitor range, field
changeable
Alarm set accuracy : ±(0.2% of F.S.+1digit) or less at 25°C
Alarm set repeatability : ±1digit or less at 25°C
Alarm delay time : 0 to 99sec (0.1 sec step, field changeable)
Alarm reset : AUTO-RESET or SELF-HOLD field changeable.
Alarm bypass function : Block off alarm output (DANGER)

OTHERS

Each channel is set for two out of three measurements (Overall monitoring,
Band-pass vibration monitoring, 1X vibration tracking monitoring) as Measure-A
and Measure-B, respectively.

The Measure-A is used for the recorder output.

VIBRATION (OVER ALL) MONITORING

Measurement : Overall monitoring
Band-pass vibration monitoring
1X vibration tracking monitoring

Rectification : Root Mean Square (RMS)

Recommend monitoring range

: 10 to 1000m/s², 10 to 175mm/s, 100 to 1000μm

Note)

· Monitoring range is the same value for each channel.

Overall monitoring

Accuracy : ±1% of F.S. at 25°C^{*3}
±2% of F.S. at 0°C to 65°C^{*3}
HPF : 10Hz (-3dB) (4 pole)
LPF : 10Hz (-3dB) (4 pole)

Band-pass vibration monitoring

Accuracy : ±1% of F.S. at 25°C^{*3}
±2% of F.S. at 0°C to 65°C^{*3}
HPF : 25Hz to 100Hz (-3dB)^{*4} (10 pole)
LPF : 100Hz to 5.5kHz (-3dB)^{*4} (10 pole)

Note) ^{*3} At calibrate frequency.

^{*4} There is un-match combination.

(See "Vibration Monitoring (Selection Table for Filter Set Value P.5".)

1X vibration tracking monitoring

Accuracy : ±3% of F.S. at 25°C
±5% of F.S. at 0°C to 65°C

Q : 22
Filter property: 2 pole
Rotation speed

: 600rpm to 6000rpm, (The sampling count per cycle:32)
600rpm to 4800rpm, (The sampling count per cycle:64)
600rpm to 2400rpm, (The sampling count per cycle:128)
Max. sweep rotation speed : 1000rpm/min

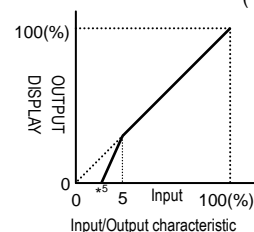
Sequence function : Used to prevent alarm output that is caused by
excessive vibration during machine startup. Block off the
DANGER-A/ALERT-A/DANGER-B/ALERT-B alarm, or
switch the alarm setup value to another number
magnified by setup number.
Sequence Setup :Block off
1 to 10 (0.1 step, field changeable)

WARNING

In case the SEQ. magnification number is setup from 2 to 10, the
alarm setup value magnified by setup number while the SEQ.
circuit is in progress should stay at or lower than 110% of the
maximum monitor range. If the number is more than 110% of the
monitor range the alarm may not output.

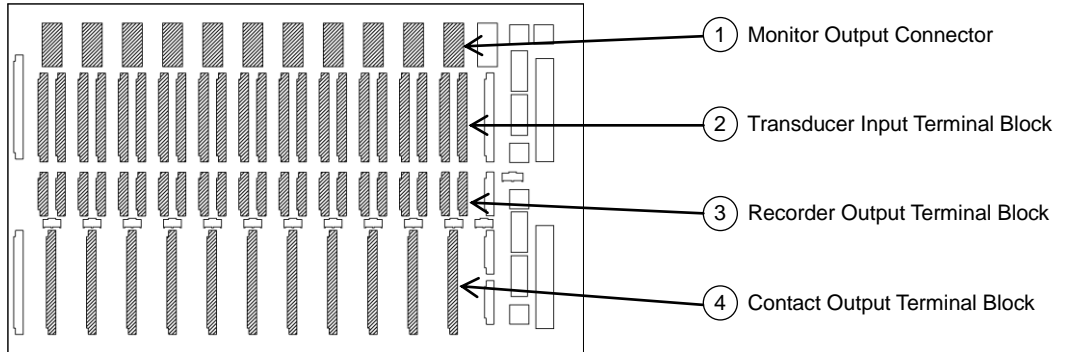
Suppression function

: If the vibration value is less than the setup value, this function is
forced to suppress the measured vibration value and recorder output.
^{*5} Suppression Setup Value: 0 to 5%
(0.1% step, field changeable)



Plug/ Terminal Block (Connector) Pin Assignment

VM-761B Instrument Rack
(Back)



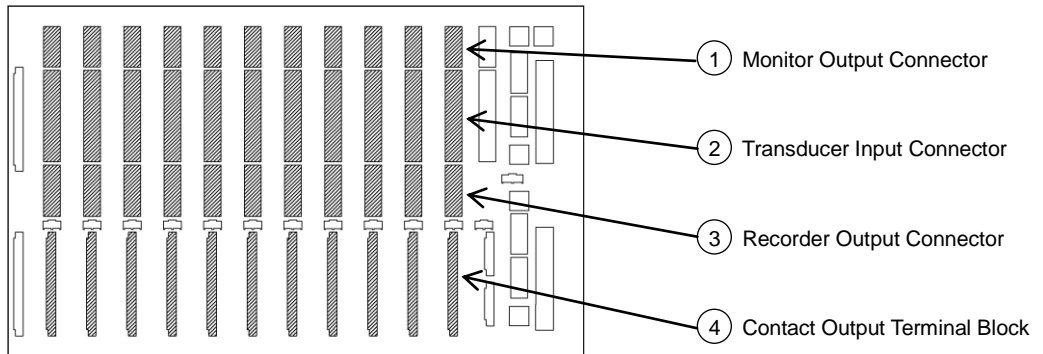
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Note1) For the accessory specification code "/TB1", the fitting terminal block plugs ②③④ are included.
For the accessory specification code "/TB1", the D-sub plug and hood ① are not included. If required,
please make necessary arrangement separately referring to the part code above.

Note2) When individually ordering specify the parts code, it is require to arrange for a necessary amount.

Plug/ Terminal Block (Connector) Pin Assignment

VM-762B Instrument Rack
(Back)



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For the accessory specification code "/TB2", the D-sub plugs and hoods ①②③ are not included.
If required, please make necessary arrangement separately referring to the part code above.

