

# Digital 3 Phase Voltage Relay



DSP-DVR



DSP-DVR-M

8Pin Socket Installation

## DSP-DVR, DVR-M

### Main Features

- Easy Installation : 8 Pin Socket
- Operation based on direct line voltage detection
  - **Protection** : Over/Under voltage, Phase Loss, Reverse Phase, Voltage Unbalance
  - **Indication** : Voltage[Line/Average], Frequency
  - **Time-Voltage operational characteristic** → Definite / Inverse
- Rated Line Voltage → 100 ~ 500VAC
- Over/Under Voltage protection within (+), (-) 20% to line voltage
- Possible to preset operation time for over/under voltage each, respectively

- Perfect check for initial line state

#### a)"dt"(trip delay time) mode is preset "OFF"

- Preset "a" in "out" mode : Main trip output(95-98) is energized (Open → Close ) in case the rated line voltage with normal forward phase state is sensed initially
- Main trip output(95-98) is trip as showing a trip cause if the initial line state is under over/under voltage, reverse phase, voltage unbalance
- v.OFF is shown in case the line voltage is not sensed initially or voltage is dropped to zero(0) while the normal operation is doing
- Preset "b" in "out" mode : Main trip output(95-98) is not energized (Open → Open ) in case the rated line voltage with normal forward phase state is sensed initially

#### b)"dt"(trip delay time) mode is preset a value(time)

- Preset "a" in "out" mode : Main trip output(95-98) is energized (Open → Close ) after "dt" is elapsed in case the rated line voltage with normal forward phase state is sensed initially
- Main trip output(95-98) is still opened(not trip) even after "dt" is elapsed if the initial state is under phase loss, also "PL" is shown
- "rP" is shown as main trip output(97-98) is still opened(not trip) after operational trip time(0.5sec) without concerning with "dt" if reverse state is sensed initially

- Trip cause is shown by characters and/or numbers

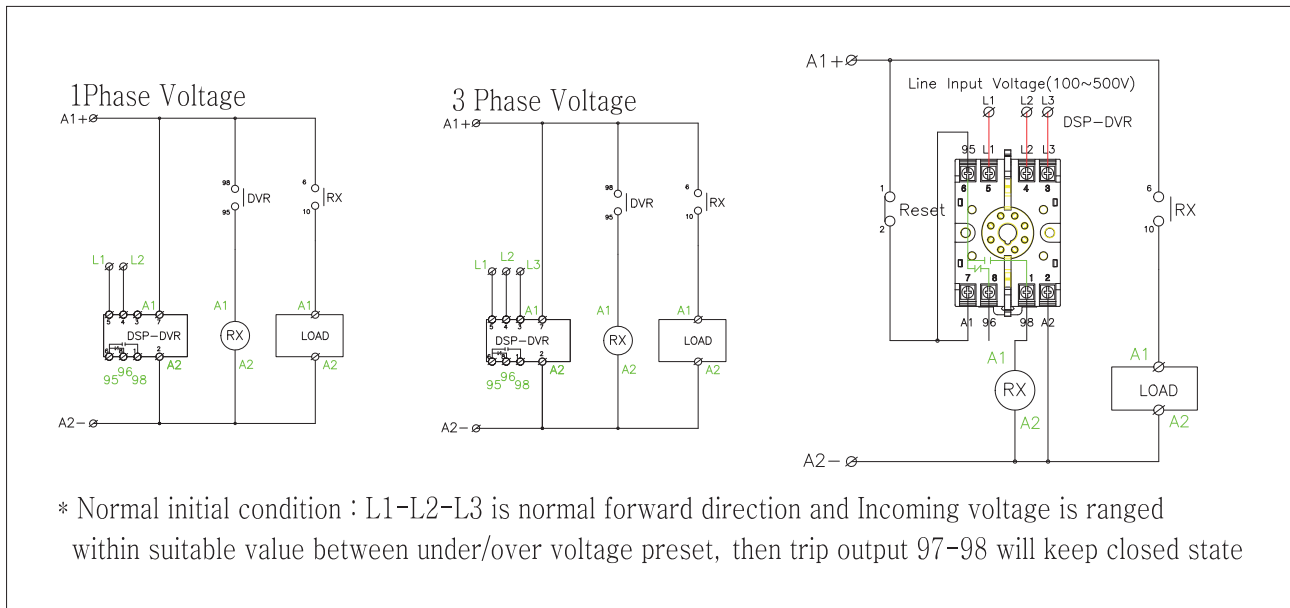
- 4 Digit Window/DVR Type    • 5 Digit Window/DVR-M Type

- 3 phase line voltage / average voltage and / or frequency is shown orderly every 3sec

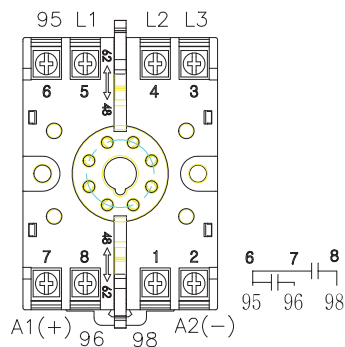
- Alarm history, latest 8 trip events    ■ Reset after a trip : auto or manual

- Self-diagnostics to check if this relay is ready to work or not

# Application Sequence Diagram



\* Note Output trip relay (95-96-98 / 1c,C-R-M(2a) of DSP is rated 3A / resistive,so it is required that aux relay with of sufficient rating to operate a large capacity of contactor should be matched with DSP output.



## Order Form

No.	Feature	Description
1	Type	• DSP-DVR : Panel Mounting Type • DSP-DVR-M : Panel Flush Mounting Type
2	Control Power	• B : DC24V • Z7 : 85~260VAC, 50/60Hz (90~370VDC)
3	Socket	• NIL : 8 pin socket is not included • 8P : 8 pin socket is included
e.g.	DSP-DVR-M-8P	Panel Flush Mounting Type, Line voltage/100~500VAC, control power/85~260VAC, 50/60Hz (90~370VDC), 8Pin socket

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