## WATTHOUR OR VARHOUR TRANSDUCER (ANY ONE)

### MODEL - TDWH, TDWH2, TSWH, TSWH2 - WATTHOUR TRANSDUCER
### TDQH2, TSQH2 - VARHOUR TRANSDUCER



**SPECIFICATIONS :**

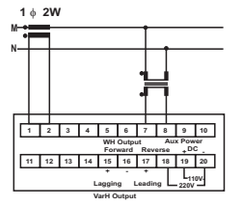
1. Input Range : Normal Voltage 110V, Effective Range 50 ~ 150V AC.
   Normal Voltage 220V, Effective Range 160 ~ 300V.
   Normal Current 5A, Effective Range 0 ~ 7.5A
   Normal Current 1A, Effective Range 0 ~ 1.5A
2. Input Over : Normal AC 110V, Voltage Over 500V Continuous.
   Self Power Mode 150V AC Maximum.
   Normal AC 5A, Current Over 15A Continuous;
   50A 10 Sec / Hour; 400A 0.5 Sec / Hour.
3. Output of WH & VarH : Open Collect Type, Effective Range 5~30V DC, 5~100mA;Option Dry Contact.
4. Uni-Direction and Bi-Direction for Watthour, Bi-direction for Varhour only.

| MODELS : CLASS | | |
|---|---|---|
| 0.2% | 0.5% | |
| TDWH | TSWH | —□—□—□—□—□—□ Watthour Uni-Direction* |
| TDWH2 | TSWH2 | —□—□—□—□—□—□ Watthour Bi-Direction* |
| TDQH2 | TSQH2 | —□—□—□—□—□—□ Varhour Bi-Direction* |

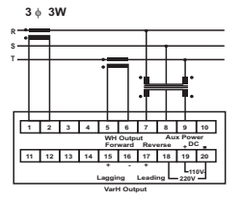
| Circuit | | I/P Voltage | | I/P Current | | Frequency | | Output | | Aux. Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 ϕ 2 W | A | 110V | A | 1A | A | 50Hz | A | WH/1 PULSE | A | AC 110/220V |
| B | 3 ϕ 3 W | B | 220V | B | 5A | B | 60Hz | B | WH/10 PULSE | B | AC 220V |
| C | 3 ϕ 4 W | | | | | | | | | C | DC 22~72V |
| | | | | | | | | | | F | AC/DC85~265V |
| | | | | | | | | | | N | Self-Power Mode |
| Y | Other | Y | Other | Y | Other | | | Y | Other | Y | Other |

### TERMINAL CONNECTION :

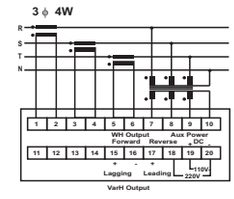
**Model : TDWH-A, TSWH-A**

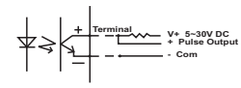



**Model : TDWH-B, TSWH-B**




**Model : TDWH-C, TSWH-C**




## WATT/WATTHOUR OR VAR/VARHOUR (ANY ONE) TRANSDUCER

### MODEL - TDWWH, TDWWH2, TSWWH, TSWWH2 - WATT / WATTHOUR TRANSDUCER
### TSQQH2 - VAR / VARHOUR TRANSDUCER



**SPECIFICATIONS :**

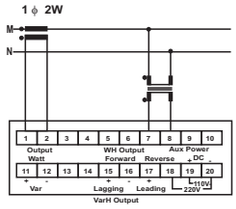
1. Input Range : Normal Voltage 110V, Effective Range 85 ~ 150V AC.
   Normal Voltage 220V, Effective Range 160 ~ 300V.
   Normal Current 5A, Effective Range 0 ~ 7.5A
   Normal Current 1A, Effective Range 0 ~ 1.5A
2. Input Over : Normal AC 110V, Voltage Over 500V Continuous.
   Self Power Mode 150V AC Maximum.
   Normal AC 5A, Current Over 15A Continuous;
   50A 10 Sec / Hour; 400A 0.5 Sec / Hour.
3. Output of WH & VarH : Open Collect Type, Effective Range 5~30V DC, 5~100mA.
4. Uni-Direction and Bi-Direction for Watt/Watthour, Bi-direction for Var Varhour only.

| MODELS : CLASS | | |
|---|---|---|
| 0.2% | 0.5% | |
| TDWWH | TSWWH | —□—□—□—□—□—□—□ Watt/Watthour Uni-Direction* |
| TDWWH2 | TSWWH2 | —□—□—□—□—□—□—□ Watt/Watthour Bi-Direction* |
| | TSQQH2 | —□—□—□—□—□—□—□ Var/Varhour Bi-Direction* |

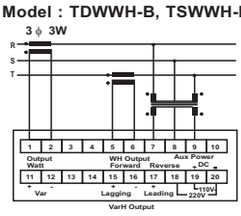
| Circuit | | I/P Voltage | | I/P Current | | Frequency | | W(VAR)O/P | | WH(VARH)O/P | | Aux. Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1 ϕ 2 W | A | 110V | A | 1A | A | 50Hz | A | 0~10mA | A | WH / 1 PULSE | A | AC 110/220V |
| B | 3 ϕ 3 W | B | 220V | B | 5A | B | 60Hz | B | 0~20mA | B | WH / 10 PULSE | B | AC 220V |
| C | 3 ϕ 4 W | | | | | | | C | 4~20mA | | | C | DC 22~72V |
| | | | | | | | | D | 0~5V | | | F | AC/DC 85~265V |
| | | | | | | | | E | 1~5V | | | | |
| | | | | | | | | N | 0~10V | | | | |
| Y | Other | Y | Other | Y | Other | | | Y | Other | Y | Other | Y | Other |

### TERMINAL CONNECTION :

**Model : TDWWH-A, TSWWH-A**




**Model : TDWWH-B, TSWWH-B**




**Model : TDWWH-C, TSWWH-C**

