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| 1. **GENERAL INFORMAYION :**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | Serial No. |  |  | Rated Voltage | 57-130 Vph-ph eff | | Make |  | Aux. Voltage | 80 – 265 VAC/DC | | ORDER NO. | RS 454 004 - AA | MODEL NO. | SPAF 340 C3 | | Frequency | 60 Hz | VT Ratio | 132KV/115V |  1. **MECHANICAL CHECKS AND VISUAL INSPECTION:**  |  |  |  | | --- | --- | --- | | ITEM | DESCRIPTION | CHECKED | | 1 | Inspect for physical damage / defects. |  | | 2 | Check tightness of all connections. |  | | 3 | Test Switch checked for correct function. |  | | 4 | Watchdog contact. |  |  ELECTRICAL TESTS: With relay energized condition  |  |  |  | | --- | --- | --- | | ITEM | DESCRIPTION | CHECKED | | 1 | Measured auxiliary supply. |  | | 2 | Clock set at local time. |  | | 3 | Time maintained when auxiliary supply removed. |  | | 5 | Relay healthy (green) LED working. |  | | 6 | Trip (red) LED working. |  |  1. **OPERATING DC SUPPLY CURRENT:**  |  |  |  |  | | --- | --- | --- | --- | | DC Volt (V) | DC Current  Without Fault (mA) | DC Current  During Fault (mA) | Calculated WATT (W) | | 125VDC |  |  |  |   ­  Burden < 3W DC & Max. Burden < 6W DC  P92x Technical Data Sheet P92x / EN TD/ F22 ( Page 6/32 ). INPUTS AND OUTPUTS TESTS: **OUTPUT RELAYS CHECKS (With Relay Energized):**   |  |  |  | | --- | --- | --- | | **OUTPUT RELAYS** | **TERMINAL NO.** | **STATUS** | | RL1 | X2: 1 – 2 |  | | RL2 | X2: 3 – 4 |  | | RL3 | X1: 15 – 16 |  | | RL4 | X1: 13 – 14 , 11 – 12 |  | | RL5 | X2: 5 – 6 |  | | RL6 | X2: 7 – 8 |  | | RL7 | X2: 9 – 10 – 11 |  | | RL8 | X2: 12 – 13 |  | | RL9 | X2: 14 – 15 – 16 |  |  1. **FREQUENCY MEASUREMENT:**  |  |  |  | | --- | --- | --- | | Applied Frequency | Measured Frequency | %Error | | 60.00 |  |  | | 59.50 |  |  | | 59.00 |  |  | | 58.00 |  |  |   Limit : ± 10 mHz  P92x Technical Data Sheet P92x / EN TD/ F22 ( Page 26/32 ).     1. **UNDERFREQUENCY PROTECTION (81) PICK UP & DROP OFF :**      |  |  |  |  | | --- | --- | --- | --- | | **STAGE** | **Frequency Set (Hz)** | **Actual Frequency –Hz** | | | PICK UP | DROP OFF | | **STAGE -1** | 59.00 |  |  | | **STAGE -2** | 58.00 |  |  | | **STAGE -3** | 57.00 |  |  | | **STAGE -4** | 56.00 |  |  |   Limit : ± 10 mHz for operate , ± 50 mHz for reset  P92x Technical Data Sheet P92x / EN TD/ F22 ( Page 26/32 ).   1. **UNDERFREQUENCY PROTECTION (81) TIMING :**  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **STAGE** | **Frequency Set (Hz)** | **TIME Set**  **(Sec)** | **Actual TIME –SEC** | | | Measured Time | ERROR | | **STAGE -1** | 59.00 | 0.50 |  |  | | **STAGE -2** | 58.00 | 1.00 |  |  | | **STAGE -3** | 57.00 | 1.50 |  |  | | **STAGE -4** | 56.00 | 2.00 |  |  |   Limits : ± 2 % or 20 msec   1. **VOLTAGE BLOCKING :**  |  |  |  |  | | --- | --- | --- | --- | | **Relay Setting**  **V (V)**  **FR (Hz)** | **MEASURED VALUES (V)** | | | | PICK UP | RESET | ERROR FOR PICK UP | | **60** |  |  |  |   Limits : ± 2 % for Pickup Value |