JKD1416PM

**TP&N Power & Lighting Boards**

With the ever greater requirement to monitor energy usage in commercial buildings the need to specify and install the correct equipment at the outset of a project is a key to controlling the budget and avoiding snagging issues. A common issue with the installation of metering is second guessing if the specification will be changed during the installation from pulsed to Modbus or vice versa. The JKD range of boards have meters which can be configured to either output and with a comprehensive range of sizes that will cover most applications where the power and lighting loads are split for monitoring purposes. There is no requirement to pre-determine which load goes on which pan assembly as both pan assemblies are rated the same at 125A. With one meter there are two independent outputs with no requirement to deduct one from the other.

| Description | Cat ref. |
|---|---|
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 4 Way/Upper Pan 6 Way | **JKD146PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 6 Way/Upper Pan 6 Way | **JKD166PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 6 Way/Upper Pan 4 Way | **JKD164PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 6 Way/Upper Pan 8 Way | **JKD168PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 8 Way/Upper Pan 8 Way | **JKD188PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 8 Way/Upper Pan 6 Way | **JKD186PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 4 Way/Upper Pan 16 Way | **JKD1416PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 16 Way/Upper Pan 4 Way | **JKD1164PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 8 Way/Upper Pan 12 Way | **JKD1812PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 12 Way/Upper Pan 8 Way | **JKD1128PM** |
| 125A Dual Metered TPN Power/Lighting Board. Lower Pan 12 Way/Upper Pan 12 Way | **JKD11212PM** |
| Single Pole Blank | **JK01B** |
| JK1 / JK2 Door Lock Kit | **JK222PK** |
| Spare Gland Plate 1.2mm | **JK2PLATEM** |
| 7 Input Data Logger with TCP/IP | **JK107DL** |

| **Interface Characteristics** | |
|---|---|
| Rated & operational voltage ($U_n$ / $U_e$) | 415V a.c. 50Hz |
| Rated insulation voltage ($U_i$) | 690V a.c. 50Hz |
| Rated impulse withstand voltage ($U_{imp}$) | 4kV |
| Rated current of the Assembly ($I_{nA}$) | 125A |
| Rated current of pan assembly | Lower Pan (In) = 125A (RDF=1)<br>Upper Pan (In) = 125A (RDF=1) |
| Rated current of an Outgoing Circuit ($I_{nC}$) | MCB 0.5A - 63A (marked rated current on device)<br>RCBO 6A - 45A (marked rated current on device) |
| Conditional Short Circuit Rating ($I_{cc}$) | 25kA |
| Protection against electric shock | Equipment shall be installed in an electrical system conforming to IEC 60364 / BS 7671 |
| Rated Diversity Factor (RDF) / Values of assumed loading | 10 way to 24 way = 0.5 Note: RDF only applies to continuously and simultaneously loaded circuits. |
| Rated frequency (fn) | 50 Hz |
| Pollution degree | 2 |
| Types of system earthing for which the ASSEMBLY is designed | TNC-S, TN-S and TT when installed in an electrical system conforming to BS 7671 |
| Intended locations | Indoor use only |
| **Stationary Assembly** | |
| Degree of protection | IP3XD with Door Closed<br>IP2XC with Door Open |
| Intended use | Distribution boards intended to be operated by ordinary persons (DBO) |
| Electromagnetic compatibility (EMC) classification | EMC Environment B |
| External design | Wall-mounted, surface type, enclosed assembly. |
| Mechanical impact protection | IK05 |
| The type of construction | Fixed parts |
| DBO Type | Type B DBO |
| Incoming Line Terminal | 70mm2 (Switch disconnector) |
| Incoming Neutral Terminal | 50mm2 Cage |
| Enclosure Earth Stud | M6 |
| Standards | BS EN 61439-3 |

| | |
|---|---|
| **Meter Characteristics** | |
| Supply | 60 to 300V AC, 50/60Hz (±5%) |
| **Serial Communication** | |
| Interface Standard and Protocol | RS485 and MODBUS RTU |
| **Input (CT)** | |
| Pluggable RJ45 | Input 1/ Input 2 |
| **Output** | |
| Pulse Output: | Voltage Range : 24V DC max |
| Current Capacity : | 100mA max |
| Pulse Duration : | Selectable Between 0.1 to 2.0sec |
| Pulse Weight : | Selectable between 0.01 to 9.99kWh |
| **Accuracy of meter** | |
| Measurement | Accuracy |
| Voltage VL-N | 0.5% of full range |
| Voltage VL-L | 0.5% of full range |
| Current A | 0.5% of full range |
| Frequency<br>For L-N Voltage >20V<br>For L-L Voltage >35V" | 0.1% of full range |
| Active power | 1.0% of full range |
| Apparent Power | 1.0% of full range |
| Reactive Power | 1.0% of full range |
| Power Factor | ±0.01% of full Range |
| Active Energy | 1.0% of full range |
| Reactive Energy | 1.0% of full range |
| Max/Min Active Power | 1.0% of full range |
| Max/Min Reactive Power | 1.0% of full range |
| Max Apparent Power | 1.0% of full range |
| Power Consumption | Less than 8VA |
| CT Primary 1 and Primary 2 | 5A to 10,000A (programmable for any value) |

| Catalogue Reference | Height (mm) | Width (mm) | Depth (mm) |
|---|---|---|---|
| **JKD146PM** | 1100 | 465 | 165.5 |
| **JKD166PM** | 1100 | 465 | 165.5 |
| **JKD164PM** | 1100 | 465 | 165.5 |
| **JKD168PM** | 1250 | 465 | 165.5 |
| **JKD188PM** | 1250 | 465 | 165.5 |
| **JKD186PM** | 1250 | 465 | 165.5 |
| **JKD1416PM** | 1400 | 465 | 165.5 |
| **JKD1164PM** | 1400 | 465 | 165.5 |
| **JKD1812PM** | 1400 | 465 | 165.5 |
| **JKD1128PM** | 1400 | 465 | 165.5 |
| **JKD11212PM** | 1400 | 465 | 165.5 |