

# TP&N Tri Metered Power & Lighting Boards - MID

Conforming to BS EN 61439-3 , with split metered sections to separately monitor small power, lighting and mechanical service loads. Complete with a 200A TP factory fitted switch disconnecter, integrated MID approved energy meter and CT's. Suitable for tenant billing. Meters communicate via Modbus RS 485.

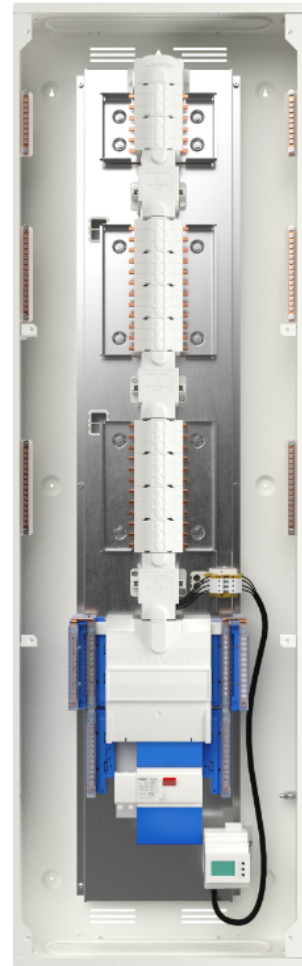
Energy data is provided for each load type (Small Power, Lighting and Mech Services), plus total board (system) data.

Advanced features facilitate multiple modes of operation, enabling the board to be used for Power and Lighting only. In this mode the upper pan data is added to the middle pan data. Orientation of load type labelling can be reversed if requires e.g Lighting circuits at the bottom of the board. This feature retains the correct load labelling when viewed directly on the meter to ensure simple visualisation of energy data directly on the meter.

For full meter details, see separate data sheet (HGR43-T series).



HGR43-T  
(Included)



### Modes of operation

<b>Mode 1 -</b>	<ul style="list-style-type: none"> <li>- Factory default setting</li> <li>- Small Power (SP) circuits - lower section of Distribution board</li> <li>- Lighting (LL) circuits - middle section of Distribution board</li> <li>- Mechanical Services (SER) - Top section of the Distribution board</li> </ul>
<b>Mode 2 -</b>	<ul style="list-style-type: none"> <li>- Selectable option as an alternative board configuration in meter settings</li> <li>- Lighting (LL) circuits - lower section of Distribution board</li> <li>- Small Power (SP) circuits middle section of Distribution board</li> <li>- Mechanical Services (SER) - Top section of the Distribution board</li> </ul>
<b>Mode 3 -</b>	<ul style="list-style-type: none"> <li>- Selectable option in meter settings as an alternative board configuration where there is no requirement for Mechanical service loads</li> <li>- Small Power (SP) circuits - lower section of Distribution board</li> <li>- Lighting (LL) - Combined middle and upper section of the Distribution board</li> </ul>
<b>Mode 4 -</b>	<ul style="list-style-type: none"> <li>- Selectable option in meter settings as an alternative board configuration where there is no requirement for Mechanical service loads</li> <li>- Lighting (LL) circuits - lower section of Distribution board</li> <li>- Small Power (SP) - Combined middle and upper section of the Distribution board</li> </ul>

**Note:** Modbus registers stay the same irrespective of Mode of operation  
- see HGR43 meter user guide for further information on Modbus registers

Description	Lower Pan Ways	Middle Pan Ways	Upper Pan Ways	Cat Ref.
200A Tri Metered TP&N Power/Lighting Board.	8	8	4	JKD2884TM
Accessories				
Type 1+2 Surge protection Kit				JK201SPD
Type 2 Surge protection Kit				JK202SPD

### 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 ( $I_{nA}$ )	200A
Rated current of pan assembly	Lower Pan ( $I_n$ ) = 200A (RDF=1) Middle Pan ( $I_n$ ) = 200A (RDF=1) Upper Pan ( $I_n$ ) = 125A (RDF=1)
Rated current of an Outgoing Circuit $I_{nC}$	MCB 0.5A - 50A (marked rated current on device) MCB 63A = 56.7A (derating to 0.9) RCBO 6A - 40A (marked rated current on device)
Rated conditional short-circuit current of the assembly ( $I_{cc}$ )	10kA with equipment and arrangements specified in Hager's technical documentation/ catalogue
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 ( $f_n$ )	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 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	25mm wide lug connection 8mm diameter
Incoming Neutral Terminal	M8 Lug
Enclosure Earth Stud	M8
Standards	BS EN 61439-3

### Energy Meter Details

Electromagnetic Compatibility	IEC/EN61326-1, IEC/EN55011 Class A, IEC/EN61000-4-2, -3, -4, -5, -6, -8, -11, IEC/EN50470-1/3
Accuracy & Functionality	IEC/EN50470-1/3, IEC/EN62050-21, IEC/EN62053-23, DIRECTIVE 2014/32/EU
Safety	IEC/EN61010, IEC/EN62053-31

Catalogue Reference	Height (mm)	Width (mm)	Depth (mm)
JKD2884TM	1550	465	165.5

