TP&N Power & Lighting Boards

MID Approved Meters

JKD146TM

Distribution boards conforming to BS EN 61439-3 , with split metered sections to separately monitor small power and lighting circuits. Complete with a factory fitted 125A TP switch disconnector, MID approved energy meter and CT's. Suitable for tenant billing if required. Meter communication is via Modbus RS 485.
Power & lighting distribution boards are specifically aimed at commercial building applications to aid compliance with current building regulation - Part L2. P&L boards provide two separate monitored groups of protection devices within a single distribution board and from a single main supply. Advanced features provide a choice of two modes of operation in this board.
The 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. Load data is labelled on the meter, SP (Small Power), LL (Lighting) and Sys (System power i.e total board load)

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

HGR43-D
(Included)

Modes of operation

Mode 3 -	- Factory default setting - Lighting (LL) circuits - top section of Distribution board - Small Power (SP) circuits - lower section of Distribution board
Mode 4 -	- Selectable option as an alternative board configuration in meter settings - Lighting (LL) circuits lower section of Distribution board - Small Power (SP) circuits middle section of Distribution board

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

Description	Lower Pan Ways	Upper Pan Ways	Cat Ref.
125A Dual Metered TP&N Power/Lighting Board.	4	6	JKD146TM
125A Dual Metered TP&N Power/Lighting Board.	6	6	JKD166TM
125A Dual Metered TP&N Power/Lighting Board.	6	4	JKD164TM
125A Dual Metered TP&N Power/Lighting Board.	6	8	JKD168TM
125A Dual Metered TP&N Power/Lighting Board.	8	8	JKD188TM
125A Dual Metered TP&N Power/Lighting Board.	8	6	JKD186TM
125A Dual Metered TP&N Power/Lighting Board.	4	16	JKD1416TM
125A Dual Metered TP&N Power/Lighting Board.	16	4	JKD1164TM
125A Dual Metered TP&N Power/Lighting Board.	8	12	JKD1812TM
125A Dual Metered TP&N Power/Lighting Board.	12	8	JKD1128TM
125A Dual Metered TP&N Power/Lighting Board.	12	12	JKD11212TM
125A Dual Metered TP&N Power/Lighting Board.	14	8	JKD1148TM
125A Dual Metered TP&N Power/Lighting Board.	8	14	JKD1814TM
Type 1 & 2 Surge Protection Kit	-	-	JK101SPD
Type 2 Surge Protection Kit	-	-	JK102SPD

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) Upper Pan (In) = 125A (RDF=1)
Rated current of an Outgoing Circuit I_{nC}	MCB 0.5A - 63A (marked rated current on device)
	RCBO 6A - 45A (marked rated current on device)
Rated conditional short-circuit current of the assembly (Icc)	10kA1 with equipment and arrangements specied 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 (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 IP2XC with Door Open
Intended use	Distribution boards intended to be operated by ordinary persons (DBO)
Electromagnetic compatibility (EMC) classication	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	50mm² (Switch disconnector)
Incoming Neutral Terminal	50mm² Cage
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)
JKD146TM	1100	465	165.5
JKD166TM	1100	465	165.5
JKD164TM	1100	465	165.5
JKD168TM	1250	465	165.5
JKD188TM	1250	465	165.5
JKD186TM	1250	465	165.5
JKD1416TM	1400	465	165.5
JKD1164TM	1400	465	165.5
JKD1812TM	1400	465	165.5
JKD1128TM	1400	465	165.5
JKD1148TM	1400	465	165.5
JKD1814TM	1400	465	165.5
JKD11212TM	1400	465	165.5