

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 60364-8-1 Edition 2.0 2019-02

LOW-VOLTAGE ELECTRICAL INSTALLATIONS –

Part 8-1: Functional aspects – Energy efficiency

CORRIGENDUM 1

2 Normative references

Replace the reference to IEC 61557-12:2007 with the following new reference:

IEC 61557-12, *Electrical safety in low voltage distribution systems up to 1 000 V AC and 1 500 V DC – Equipment for testing, measuring or monitoring of protective measures – Part 12: Power metering and monitoring devices (PMD)*

4.1.3 Design principles

Replace the first dashed list item with the following new item:

– load energy profile (active and reactive energy);

8.3.1.2 Requirements on accuracy and measuring range

Table 1

In the first row, second column, replace "IEC 62052-22" with "IEC 62053-22". In the second and third rows, third column, replace "PMD-1", "PMD-2" and "PMD-3" with "PMD-I", "PMD-II" and "PMD-III" respectively, as shown:

Measurement application	Applicable IEC product standards	Device name according to standards	Usual device name	Complementary explanations
Billing (Contractual)	or IEC 62053-21 or IEC 62053-22	Electricity metering equipment	Revenue meter, electricity meter, utility meter	Energy metering for billing applications (e.g. utility invoicing a landlord or a mall owner, sub-billing to tenants)
Energy usage analysis	IEC 61557-12 ^a	Power metering and monitoring device (PMD-I or PMD-II or PMD-III)	Power meter, energy meter	Energy cost and usage analysis (for cost allocation or sub-billing within a company or for energy efficiency purposes)
Power monitoring	IEC 61557-12 ^b	Power metering and monitoring device (PMD-II or PMD-III)	Power meter, energy meter	Demand side power quality analysis and energy cost and usage analysis

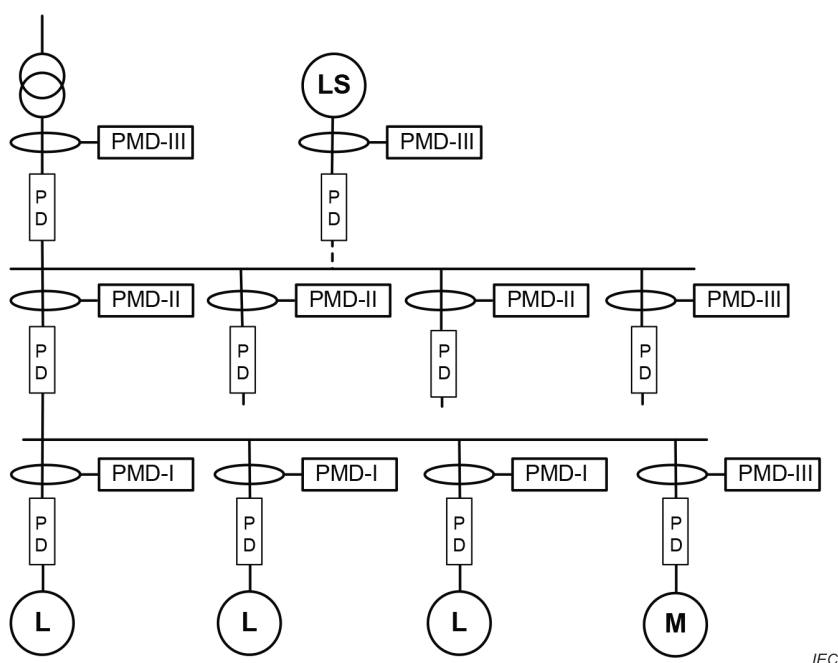
Energy estimation		Indicator or sensor	Energy estimator	Devices for giving information needed to correctly operate the energy management system, for example running time of equipment, number of operation, basic measurement
<p>^a Devices used for power quality monitoring, when they provide active energy measurement function, can be used for energy usage analysis.</p> <p>^b Devices used for power quality monitoring in accordance with IEC 62586-1 can be used for power monitoring especially where comparable measurements are needed.</p> <p>NOTE Other information such as occupancy, number of operations, manufacturing figures, is provided by different instruments and are covered by other standards.</p>				

8.3.1.3 Measurement

Replace, in the 3 dashed list items, in the third paragraph, "PMD-1", "PMD-2" and "PMD-3" with "PMD-I", "PMD-II" and "PMD-III" respectively.

Figure 3

Replace Figure 3, including the Key, with the following new Figure 3 and Key:



IEC

Key

Symbol	Function
PMD	power metering and monitoring device
PMD-I	PMD including at least: E_a
PMD-II	PMD including at least: P , Q , S , E_a , E_r , f , I , U and/or V , PF ,
PMD-III	PMD including at least: P , Q , S , E_a , E_r , E_{ap} , f , I , I_N , U and/or V , PF , THD_U and/or THD_V and/or $THD-R_U$ and/or $THD-R_V$, THD_I and/or $THD-R_I$
P	total active power
E_a	total active energy
Q	total reactive power
S	total apparent power