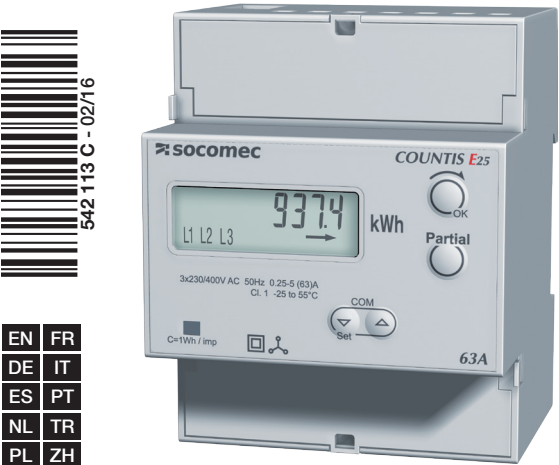


COUNTIS E25/E26

Three-phase Digital Energy meters Direct connection 63A M-Bus



EN	FR
DE	IT
ES	PT
NL	TR
PL	ZH

COUNTIS E25 : ref. 4850 3037
COUNTIS E26 (MID) : ref. 4850 3038



Certificate of conformity with MID Directive, User Manual:
<http://www.socomec.com/en/countis-e2x>

www.socomec.com



EN Three-phase Digital Energy meters - Direct connection 63A M-Bus

This equipment must be mounted only by professionals. The manufacturer cannot be held liable for any failure to follow the instructions given in this document and in document 542104 which can be downloaded from the website: www.socomec.com.

- ⚠ Risk of electrocution, burns or explosion**

 - this device must only be installed and maintained by qualified and duly authorised personnel
 - always use a suitable voltage tester to ensure there is no voltage supplied to the device
 - put all mechanisms, door and covers back in place before energising the device
 - always supply the device with the correct rated voltage

Failure to take these precautions could cause serious injuries.
- ⚠ Risk of damaging device**

Chek the following :

 - the frequency of the distribution system IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - the maximum voltage at the voltage input terminals is 276 VAC phase / neutral
 - a maximum current of 63 A

FR Compteur d'énergie triphasé - Direct 63A M-Bus

Le montage de ces matériels ne peut être effectué que par des professionnels. Le non respect des indications de la présente notice ainsi que la notice générale 542104 téléchargeable sur le site: www.socomec.com ne saurait engager la responsabilité du constructeur.

- ⚠ Risque d'électrocution, de brûlures ou d'explosion**

 - l'installation et l'entretien de cet appareil ne doivent être effectués que par du personnel qualifié et habilité
 - utilisez toujours un vérificateur d'absence de tension approprié pour confirmer l'absence de tension
 - remplacez tous les dispositifs, les portes et les couvercles avant de mettre cet appareil sous tension
 - utilisez toujours la tension assignée appropriée pour alimenter cet appareil.

Si ces précautions n'étaient pas respectées, cela pourrait entraîner des blessures graves.
- ⚠ Risque de détérioration de l'appareil**

Veillez à respecter :

 - la fréquence du réseau CEI: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - une tension maximum aux bornes des entrées tension de 276 VAC phase / neutre
 - un courant maximum de 63 A

DE Wirkenergiezähler für Drei-phasige Netze - Direkt 63A M-Bus

Die Montage muss von einem Fachmann vorgenommen werden. Werden die Anweisungen der vorliegenden Anweisung sowie die allgemeine Bedienungsanleitung 542104, die auf der Webseite: www.socomec.com heruntergeladen werden kann, nicht beachtet, entfällt die Haftung des Herstellers.

- ⚠ Gefahr von Stromschlägen, Verbrennungen oder Explosionen**

 - Dieses Gerät darf nur von einer entsprechend qualifizierten und befugten Personen installiert und gewartet werden.
 - Stellen Sie mit Hilfe eines geeigneten Spannungs-anzeigergeräts sicher, dass keine Spannung anliegt.
 - Alle Vorrichtungen, Türen und Deckel vor dem erneuten Einschalten des Gerätes wieder anbringen.
 - Nur die vorgegebene Spannung zur Versorgung des Gerätes verwenden.

Eine Nichteinhaltung dieser Vorsichtsmaßnahmen kann zu schweren Verletzungen führen
- ⚠ Gefahr einer Beschädigung des Gerätes**

Bitte beachten Sie:

 - Die Netzfrequenz IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - Eine maximale Spannung an den Spannungseingangsklemmen von 276 V Phase / Neutral
 - Einen maximalen Strom von 63 A

IT Contatore di energia trifase - Diretto 63A M-Bus

Questi prodotti devono essere montati esclusivamente da professionisti; Il mancato rispetto delle indicazioni contenute nel presente manuale o nel file 542104 scaricabile sul sito www.socomec.com, solleva il costruttore da ogni responsabilità.

- ⚠ Rischi di folgorazione, ustioni o esplosione.**

 - L'installazione e la manutenzione ordinaria di questo apparecchio devono essere effettuate esclusivamente da personale qualificato e abilitato.
 - Utilizzare sempre un opportuno dispositivo di rilevamento di tensione per confermare l'assenza di tensione.
 - Rimontare tutti i dispositivi, le portelle e i coperchi prima di mettere l'apparecchio sotto tensione.
 - utilizzare sempre la tensione opportuna per alimentare questo apparecchio.

Il mancato rispetto di queste precauzioni potrebbe comportare gravi lesioni.
- ⚠ Rischi di deterioramento dell'apparecchio.**

Attenzione rispettare:

 - La frequenza di rete IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - Una tensione massima ai morsetti degli ingressi di tensione da 276 VAC fase / neutro.
 - Una corrente massima di 63 A.

ES Contadores de energía trifásicas - Directo 63A M-Bus

El montaje de esto materiales sólo puede ser efectuado por profesionales. Si no se cumplen la indicaciones mencionadas en el presente manual o el manual de uso 542104 descargable en www.socomec.com, se excluye cualquier responsabilidad del fabricante.

- ⚠ Riesgo de electrocución, de quemaduras o de explosión**

 - la instalación y el mantenimiento de este equipo deberán correr a cargo de personal cualificado y homologado
 - utilice siempre un comprobador de ausencia de tensión adecuado para confirmar la ausencia de tensión
 - volver a colocar todos los dispositivos, tapas y puertas antes de poner el aparato en tensión
 - utilice siempre la tensión asignada adecuada para alimentar el aparato

Si no se adoptan estas precauciones, existe riesgo de sufrir lesiones graves.
- ⚠ Riesgo de deterioro del aparato**

Si requiere respetar:

 - la frecuencia de la red IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - una tensión máxima en los bornes de las entradas de tensión de 276 VAC fase / neutro
 - la intensidad máxima de 63 A

PT Contador de energia trifásica - Directa 63A M-Bus

A montagem destes materiais só pode ser realizada por profissionais. O não cumprimento das indicações deste manual assim como do manual de instrução geral 542104 disponível no site: www.socomec.com, não poderá imputar a responsabilidade do construtor.

- ⚠ Riscos de electrocussão, de queimaduras ou de explosão**

 - a instalação e a manutenção deste aparelho só devem ser efectuadas por pessoal qualificado e com habilitações para tal
 - utilize sempre um verificador de ausência de tensão apropriado, para confirmar a ausência de tensão
 - colocar no sítio todos os dispositivos, as portas e as tampas antes de restabelecer a tensão no aparelho
 - utilizar sempre a tensão de referência apropriada para alimentar o aparelho

Se estas precauções não forem respeitadas, poderão ocorrer ferimentos graves.
- ⚠ Riscos de deterioração do aparelho**

Respeitar:

 - a frequência da rede IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - uma tensão máxima nos terminais das entradas tensão de 276 VAC fase / neutro
 - uma corrente máxima de 63 A

NL Driefasig energieteller - Direct 63A M-Bus

Het monteren van dit materiaal mag enkel gebeuren door professionelen. Bij het niet respecteren van de aanwijzingen in dit instructie-bericht, alsook de algemene instructies 542104, te downloaden op de website www.socomec.com, vervalt de verantwoordelijkheid van de fabricant.

- ⚠ Risico van elektrocutie, brandwonden of explosie**

 - de installatie en het onderhoud van dit apparaat mogen alleen worden uitgevoerd door gekwalificeerd en bekwaam personeel
 - gebruik altijd een goede spanningstester om te controleren of er geen spanning is
 - alle onderdelen, deuren en deksels terugplaatsen alvorens het toestel onder spanning te zetten
 - gebruik altijd de juiste nominale spanning om dit toestel te voeden

Indien deze voorschriften niet in acht worden genomen, kan dit ernstige verwondingen tot gevolg hebben.
- ⚠ Risico van beschadiging van het toestel**

Gelieve de volgende elementen in acht te nemen:

 - de spanning van de hulpvoeding IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - een maximumspanning op de ingangsaansluitingen, spanning van 276 VAC fase / neutraal
 - een maximale stroom van 63 A

TR Üç fazlı Dijital Enerji analizörleri – 63A M-Bus Bağlantısı

Bu ekipmanın montajı sadece yetkin kişiler tarafından yapılmalıdır. Bu ve 542104 numaralı dokümandaki montaj talimatlarına www.socomec.com adresinden ulaşılabilir. Bu talimatlar sırasında ortaya çıkacak anızlarda üretici firma sorumlu tutulamaz.

- ⚠ Elektrik çarpması, yanma veya patlama riski**

 - Bu cihazın kurulumu ve bakımı sadece bu işe yetkin ve yeterli bilgiye sahip kişiler tarafından yapılmalıdır.
 - Cihazın besleme gerilimi olup olmadığının emin olmak için her zaman uygun bir gerilim test cihazı kullanın.
 - Cihaza besleme gerilimi uygulamadan önce tüm parçaları ve kapakları yerine monte edin.
 - Cihazı daima nominal çalışma gerilimi ile besleyin.

Bu talimatlara uyulmaması ciddi yaralanmalara neden olabilir.
- ⚠ Arıza riski**

Kontrol edin:

 - Dağıtım sisteminin frekansı IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - Giriş gerilimi max. 276 VAC faz / nötr
 - Max. akım 63 A

PL Trójfazowy licznik energii czynnej - pomiar bezpośredni do 63 A, komunikacja M-Bus

Niniejsze urządzenie powinno być instalowane wyłącznie przez osoby wykwalifikowane. Producent nie ponosi żadnej odpowiedzialności za jakiegokolwiek uszkodzenia wynikające z nieprzestrzegania instrukcji zawartych w niniejszym dokumencie oraz w dokumencie nr 542104 który można pobrać ze strony internetowej: www.socomec.com

- ⚠ Niebezpieczeństwo porażenia prądem, oparzenia lub wybuchu**

 - urządzenie powinno być instalowane i konserwowane wyłącznie przez osoby wykwalifikowane i uprawnione
 - w celu sprawdzenia, czy do urządzenia jest podłączone napięcie, korzystać zawsze z odpowiedniego próbnika napięcia
 - przed podłączeniem urządzenia do zasilania, zamocować wszystkie mechanizmy, drzwiczki i pokrywy na swoim miejscu
 - zawsze zasilac urządzenie odpowiednim napięciem znamionowym

Nieprzestrzeganie niniejszych środków ostrożności może być przyczyną poważnych obrażeń.
- ⚠ Niebezpieczeństwo uszkodzenia urządzenia:**

Sprawdź:

 - częstotliwość sieci zasilającej IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - czy maksymalne napięcie na zaciskach wejściowych wynosi 276 VAC faza / neutralny
 - maksymalny prąd 63 A

ZH 三相数字式电能表 一直连 63A M-Bus

该装置必须由专业人员进行安装。如不遵守本文档及 542104 号文档中的说明使用所产生的任何后果，制造商不承担责任；542104 号文档可在该网站下载：www.socomec.com。

- ⚠ 有触电致死，燃烧以及爆炸的危险**

 - 该装置必须由具备专业资质的人员进行安装与检修
 - 始终使用合适的电压检测装置来确定无电压
 - 在给该装置通电之前，将所有的机械装置、门、封盖都归位
 - 始终供给装置正确的额定电压

不遵守上述规范将会导致严重伤害。
- ⚠ 导致装置损坏的风险**

请检查以下几项：

 - 电网频率 IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz
 - 电压输入端的最大电压为 276 V 相/中性
 - 最大电流 63 A

Technical characteristics

Data in compliance with EN 50470-1, EN 50470-3

General	
Housing	4 modules DIN 43880
Mounting	DIN rail EN 60715
Depth	72 mm
Operating features	
Connectivity	4 wires 230/400V
Storage of energy values and configuration	yes EEPROM
Display tariffs identifier	T1 and T2
Supply	
Operating voltage range	92 ... 276 VAC
Operating frequency range	45 ... 65 Hz
Maximum power dissipation (voltage circuit)	≤ 2 (0.6) VA (W)
Overload capability	
Voltage Un continuous	480 VAC phase to phase
Voltage Un momentary (1 s)	800 V phase to phase
Current Imax continuous	63 A
Current Imax momentary (1 s)	1890 A

Display	
Display type	9 (2 decimal) digits
Active energy: 1 display, 9-digit	0.01 -> 9999999.99 kWh
Display period refresh	1 s
Measuring accuracy	
Active energy and power	class B class EN 50470-3
Measuring input	
Type of connection	400 V phase to phase
Certified voltage Un	230 VAC
Current Iref	5 A
Current Imin	0.25 A
Operating range current (Ist ... Imax)	0.015 ... 63 A
Certified frequency fn	IEC: 50/60 Hz \pm 1 Hz MID: 50 Hz \pm 1 Hz

Starting current for energy measurement (Ist)	15 mA
Optical interfaces	
Meter constant	1 Wh/imp
Safety	
Indoor meter	yes
Degree of pollution	2
Operational voltage	300 VAC
AC voltage test (EN 50470-3, 7.2)	4 kV
Impulse voltage test	6 kV
Protection class (EN 50470)	class II
Housing material flame resistance	class V0

Embedded communication	
M-Bus	2 wires up to 9600 bps
Isolation class	SELV circuit

Connection terminals	
Terminal capacity current paths	flexible or rigid: 1.5 to 35 mm ²
Terminal capacity COM and tariff	flexible 1.5 to 2.5 / rigid 1 to 4 mm ²
Environmental conditions	
Mechanical environment	M1
Electromagnetic environment	E2
Operating temperature	-25 ... +55 °C
Limit temperature of transportation and storage	-25 ... +70 °C
Relative humidity (not condensation)	≤ 80 %
Vibrations	± 0.075 mm
Degree protection	IP51(*)/IP20

(*) For the installation in a cabinet at least with IP51 protection.

1

0.35 in / 9 mm
PZ2 0,8 Nm

0.61 in / 15.5 mm
PZ2 2 Nm

72 6 44 64 45 90

2

4 wires connection, monitoring any 4 wires load

This diagram illustrates a 4-wire connection setup for monitoring any 4-wire load. The system includes a 230 VAC source (T1/2) with phases N, L, and two COM M-Bus lines (+ and -). The load is connected to a 230/400 VAC, 50 Hz supply. The load is divided into three sections, each with a 3 x 63A breaker. The load is connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines). The load is also connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The load is monitored by three current transformers (CTs) connected to the 230 VAC source. The CTs are connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The CTs are also connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines). The CTs are connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The CTs are also connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines).

4 wires connection, monitoring any 3 wires load

This diagram illustrates a 4-wire connection setup for monitoring any 3-wire load. The system includes a 230 VAC source (T1/2) with phases N, L, and two COM M-Bus lines (+ and -). The load is connected to a 230/400 VAC, 50 Hz supply. The load is divided into three sections, each with a 3 x 63A breaker. The load is connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines). The load is also connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The load is monitored by three current transformers (CTs) connected to the 230 VAC source. The CTs are connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The CTs are also connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines). The CTs are connected to the 230/400 VAC supply via a 4-wire connection (L1, L2, L3, and N). The CTs are also connected to the 230 VAC source via a 4-wire connection (N, L, and two COM M-Bus lines).

3

MID
Safety-sealing
between upper
and lower
housing part

EN Sealable terminal covers	PT Tapa-bornes selável
FR Capots plombables	NL Klemafdekking beloodbaar
DE Verplombbare Klemmenabdeckung	TR Klemafdekking beloodbaar
IT Coprimorsetti piombabile	PL Plombowane osłony zacisków
ES Cubrebornes precintable	ZH 可密封的终端覆盖

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Impression 1 couleur noire - CMB blanc 70g/m² - Format ouvert 360x210mm - Format plié 90x140mm

4 M-Bus

The diagram illustrates the M-Bus protocol with four parallel data streams. Each stream consists of a sequence of frames. Frame 1: Addr 18, 5 sec timer, OK x4. Frame 2: Addr 18, 5 sec timer, OK x4. Frame 3: Addr 35, 5 sec timer, OK x1. Frame 4: Addr 35, OK x1. The streams are connected by a common bus line at the bottom.

5

Device switch ON

↓

Ea+ (kWh) Tariff T1/T2
or
Ea- (kWh) Tariff T1/T2

105607283
L1 L2 L3 T2 →

↓

Ea- (kWh) Tariff T1/T2
or
Ea+ (kWh) Tariff T1/T2

2701565
L1 L2 L3 T2 ←
L1 L2 L3 T1 →
L1 L2 L3 T1 ←

↓

M-Bus

Addr 35

↓

br 9600

↓

Ad24 6808

↓

Ad2L 3347

↓

Firmware release

rEL 20

↓

Firmware checksum

CH 4455

↓

0000000000
L1 L2 L3 T8 ↔ P

Diagram illustrating the sequence of LCD displays and button presses (OK and Partial) for setting the device parameters:

- Device switch ON** (OK x1)
- Ea+ (kWh) Tariff T1/T2 or Ea- (kWh) Tariff T1/T2** (OK x1)
- Ea- (kWh) Tariff T1/T2 or Ea+ (kWh) Tariff T1/T2** (OK x3, Partial)
- M-Bus** (OK x1, Partial)
- br 9600** (OK x1, Partial)
- Ad24 6808** (OK x1, Partial)
- Ad2L 3347** (OK x1, Partial)
- Firmware release** (OK x1, Partial)
- Firmware checksum** (OK x1, Partial)
- 0000000000** (OK x1, Partial)