

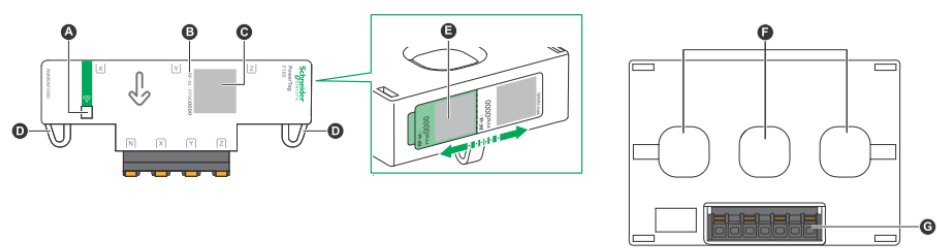
## GENERAL INFORMATION

FCCID: 2AH7L-PLTPPB3P

### 1.1. Product description








**1** Description / Description / Descripción / Beschreibung / Legenda / Descrição / Описание / 描述

**1.1 PowerTag**

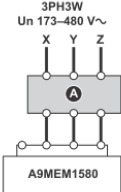
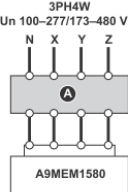



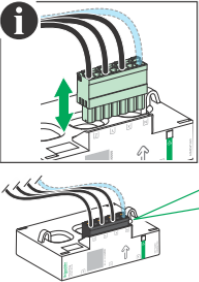
en	fr	es	de
<b>A</b> Status LED.	Voyant d'état.	LED de estado.	Status-LEDs.
<b>B</b> RF-Id identifier.	Identifiant RF-Id.	Identificador de RFID.	HF-Kennung.
<b>C</b> QR code to access device information.	Code QR d'accès aux informations sur l'appareil.	Código QR para acceder a información sobre el dispositivo.	QR-Code für den Zugriff auf die Geräteinformationen.
<b>D</b> Cable tie brackets.	Support pour collier serre-câbles.	Soportes de bridas de cables.	Kabelbinderklammern.
<b>E</b> Label with a detachable adhesive part carrying a QR code and a RF-Id identifier, useable during commissioning on certain concentrators.	Étiquette avec une partie autocollante détachable portant un code QR et un identifiant RF-Id, utilisable durant la mise en service sur certains concentrateurs.	Etiqueta con una parte adhesiva que puede despegarse y en la que figuran un código QR y un identificador de RFID, que pueden usarse durante la puesta en marcha en determinados concentradores.	Etikett mit einem abziehbaren Klebeteil, auf dem ein QR-Code und eine HF-Kennung angegeben sind, die bei der Inbetriebnahme mit bestimmten Konzentratoren verwendet werden können.
<b>F</b> Conductor feedthroughs for current measurement.	Passage des conducteurs pour la mesure de courant.	Paso de los conductores para la medición de corriente.	Leitungsdurchführung für die Strommessung.
<b>G</b> Withdrawable connector for voltage take-offs connection.	Connecteur débrochable pour raccordement des prises de tension.	Conector extraíble para conexión de tomas de tensión.	Abnehmbarer Steckanschluss für die Spannungsübertragung.

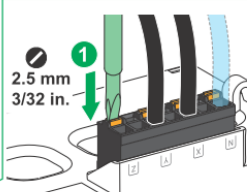
it	pt	ru	zh
<b>A</b> LED di stato.	LED de status.	Светодиод состояния	状态 LED.
<b>B</b> Identificativo RF-Id.	Identificador RF-Id.	RF-идентификатор	RF-Id 标识符。
<b>C</b> Codice QR per accedere alle informazioni sul dispositivo.	Código QR para acessar informações do dispositivo.	QR-код для доступа к информации об изделии	设备信息的对应 QR 代码。
<b>D</b> Supporti per serracavo.	Suportes de braçadeiras.	Кронштейны для кабельных стяжек	电缆扎带支架。
<b>E</b> Etichetta con parte autoadesiva staccabile contenente un codice QR e un identificativo RF-Id, utilizzabile durante la messa in servizio su determinati concentratori.	Etiqueta com uma parte adesiva destacável com um código QR e um identificador de RF-Id, utilizável durante o comissionamento em determinados concentradores.	Этикетка с отсоединяемой клейкой частью, на которой указан QR-код и RF-идентификатор, подлежит использованию при вводе в эксплуатацию на некоторых концентраторах.	产品标签，可移除部分粘贴有二维码和 RF-Id 标识符，可在调试某些集中器时使用。
<b>F</b> Passaggio dei conduttori per la misura della corrente.	Passagem dos condutores para a medição de corrente.	Ввод проводников для измерения тока.	导线穿过用于测量电流。
<b>G</b> Connettore scollegabile per collegamento di prese di tensione.	Conector extraível para conexão de tomadas de tensão.	Съемный соединитель для соединений устройств отбора напряжения.	抽出式接口，用于接入电压源。

1.2 Status LED / Voyant d'état / LED de estado / Status-LEDs / LED di stato / LED de status / Светодиод состояния / 状态 LED						
<b>en</b> Before proceeding with pairing, ensure that the concentrator has the latest available software version. Refer to the user manual of the concerned concentrator.	<b>fr</b> Avant de procéder à l'appairage, assurez-vous que le concentrateur dispose de la dernière version disponible du micrologiciel. Reportez-vous au manuel d'utilisation du concentrateur concerné.	<b>es</b> Antes de proceder al apareamiento, asegúrese de que el concentrador dispone de la última versión disponible del microprograma. Consulte el manual de instrucciones del concentrador en cuestión.	<b>de</b> Stellen Sie vor dem Pairing-Vorgang sicher, dass der Datenkonzentrator über die neueste Firmware-Version verfügt. Informationen dazu finden Sie im Handbuch des betreffenden Datenkonzentrators.	<b>it</b> Prima di procedere all'associazione, assicurarsi che il concentratore disponga dell'ultima versione disponibile del microsoftware. Consultare la guida all'uso del concentratore interessato.	<b>pt</b> Antes de proceder ao emparelhamento, certifique-se de que o concentrador dispõe da última versão disponível do micro software. Consulte o manual de utilização do concentrador em questão.	<b>ru</b> Перед подключением убедитесь, что концентратор имеет самую последнюю доступную версию прошивки. Обратитесь к руководству по эксплуатации соответствующего концентратора.
<b>zh</b> 在进行通讯配对前，请确认PowerTag智能网关模块的软件版本为最新。请参阅PowerTag智能网关模块用户手册。						
						
<b>en</b> PowerTag switched off.	PowerTag is searching a concentrator.	PowerTag in identification mode.	PowerTag is in network. Normal communication with the concentrator.	Occasional loss of communication.	Loss of communication with the concentrator.	Internal error detected.
<b>fr</b> PowerTag hors tension.	PowerTag est en recherche de concentrateur.	PowerTag est en mode d'identification.	PowerTag mis en réseau. Communication normale avec le concentrateur.	Perte ponctuelle de la communication.	Perte de communication avec le concentrateur.	Erreur interne détectée.
<b>es</b> PowerTag apagado.	El PowerTag está buscando un concentrador.	PowerTag en modo identificación.	PowerTag en red. Comunicación normal con el concentrador.	Pérdida ocasional de comunicación.	Pérdida de comunicación con el concentrador.	Error interno detectado.
<b>de</b> Der PowerTag ist ausgeschaltet.	Der PowerTag sucht nach einem Empfänger.	Der PowerTag befindet sich im Identifikations-Modus.	Der PowerTag ist verbunden. Normale Kommunikation mit dem Empfänger.	Gelegentlicher Kommunikationsverlust.	Verlust der Kommunikation mit dem Empfänger.	Interner Fehler.
<b>it</b> PowerTag senza tensione.	L'PowerTag sta cercando il concentratore.	PowerTag in modalità d'identificazione.	PowerTag in rete. Comunicazione normale con il concentratore.	Perdita di comunicazione occasionale.	Perdita di comunicazione con il concentratore.	Rilevato errore interno.
<b>pt</b> PowerTag desligado.	O PowerTag está a procurar um concentrador.	O PowerTag está no modo de identificação.	O PowerTag está ligado em rede. Comunicação normal com o concentrador.	Perda temporária de comunicação.	Perda de comunicação com o concentrador.	Erro interno detectado.
<b>ru</b> PowerTag выключен.	PowerTag в режиме поиска концентратора.	PowerTag в режиме идентификации.	PowerTag в сети. Нормальная связь с концентратором.	Периодическая потеря связи.	Потеря связи с концентратором.	Обнаружена внутренняя ошибка.
<b>zh</b> PowerTag 关闭。	PowerTag 正在寻找集线器。	PowerTag 处于识别模式。	PowerTag 已经联网。与集线器正常通信。	偶尔失去通讯。	与集线器的通信丢失。	检测到内部错误。

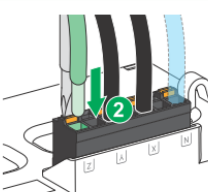
## 2 Installation and Connection / Installation et raccordement / Instalación y conexión / Installation und Anschluss / Installazione e collegamento / Instalação e ligação / Установка и подключение / 安装和连接

<b>WARNING / AVERTISSEMENT / ADVERTENCIA / WARNUNG / AVVERTIMENTO / ATENÇÃO / ПРЕДУПРЕЖДЕНИЕ / 警告</b>			
<b>FIRE HAZARD</b> The PowerTag must be associated with an easily accessible upstream protection (2 A) and circuit-breaker system, marked with callout A in the schematic below. Failure to follow these instructions can result in death, serious injury, or equipment damage.	<b>RISQUE D'INCENDIE</b> PowerTag doit être associé à un dispositif de protection (2 A) et de déconnexion amont facilement accessible, repéré A dans le schéma ci-dessous. Le non-respect de ces instructions peut provoquer la mort, des blessures graves ou des dommages matériels.	<b>RIESGO DE INCENDIO</b> El PowerTag se debe asociar a un dispositivo de protección (2 A) y desconexión aguas arriba fácilmente accesible, indicado con la marca A en el diagrama a continuación. Si no se siguen estas instrucciones pueden producirse lesiones personales graves o mortales o daños en el equipo.	<b>BRANDGEFAHR</b> Der PowerTag muss mit einem vorgeschalteten Schutzorgan (2 A) und Leistungsschuttschalter verbunden sein, auf die einfach zugegriffen werden kann (Kennzeichnung A in der unteren Abbildung). Die Nichtbeachtung dieser Anweisungen kann Tod, schwere Verletzungen oder Sachschäden zur Folge haben.
<b>RISCHIO DI INCENDIO</b> Il PowerTag deve essere associato a un dispositivo di protezione (2 A) e disconnessione a monte facilmente accessibile, contrassegnato con il richiamo A nello schema di seguito. Il mancato rispetto di queste istruzioni può provocare morte, gravi infortuni o danni alle apparecchiature.	<b>PERIGO DE INCÊNDIO</b> O PowerTag deve estar associado a um sistema de proteção a montante (2 A) e disjuntor facilmente acessível, marcado com a frase de destaque A no esquema abaixo. A não observação destas instruções pode provocar a morte, ferimentos graves, ou danos no equipamento.	<b>РИСК ВОЗНИКНОВЕНИЯ ПОЖАРА</b> Должен быть обеспечен свободный доступ к устройству защиты PowerTag (2 A) и размыкания входной цепи, обозначенному как A на приведенной ниже схеме. Несоблюдение этих инструкций может привести к смерти, серьезной травме или повреждению оборудования.	<b>火災危険</b> PowerTag 必须配套使用便于检修的上游保护装置 (2 A) 和断路器系统，如下图中 A 所示。不遵循上述说明可能导致严重的人身伤害甚至死亡，或设备损坏。
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>3PH3W Un 173-480 V~</p>  <p>A9MEM1580</p> </div> <div style="text-align: center;"> <p>3PH4W Un 100-277/173-480 V~</p>  <p>A9MEM1580</p> </div> </div>			

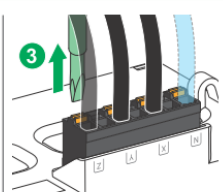










2.5 mm  
3/32 in.



2



3

				
11 mm 0.4 in.	0.2–1.5 mm <sup>2</sup> 24–16 AWG	0.2–2.5 mm <sup>2</sup> 24–14 AWG	0.25–1.5 mm <sup>2</sup> 24–16 AWG	≥ 80 °C ≥ 176 °F

**PLEASE NOTE**  
Install the PowerTag such that there is no mechanical interference between the voltage take-offs and the cover.

**NOTA**  
Installare il PowerTag in modo da evitare interferenza meccanica tra prese di tensione e coperchio.

**REMARQUE IMPORTANTE**  
Installez le PowerTag de manière à ce qu'il n'y ait pas d'interférence entre les prises de tension et le plastron.


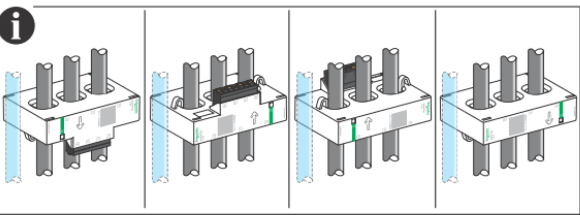
**NOTA**  
Instale o PowerTag de forma que não haja interferência mecânica entre as tomadas de tensão e a tampa.

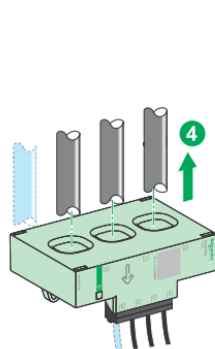
**TENGA EN CUENTA**  
Instale el PowerTag de forma que no haya interferencias mecánicas entre las tomas de tensión y la cubierta.

**ОБРАТИТЕ ВНИМАНИЕ**  
Устройство PowerTag должно быть установлено так, чтобы исключить механические помехи между устройствами отбора напряжения и крышкой.

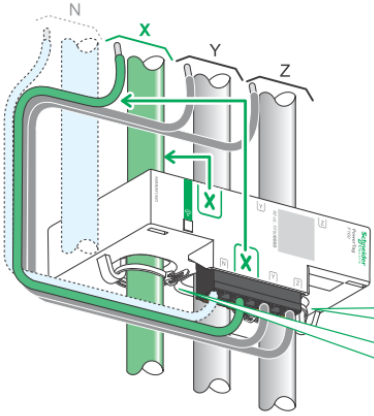
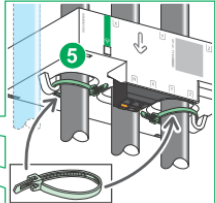
**BITTE BEACHTEN**  
Installieren Sie den PowerTag so, dass es zu keiner mechanischen Störung zwischen den Spannungsanschlüssen und der Abdeckung kommen kann.

**请注意**  
PowerTag的安装应确保电压接插件与外壳之间无机械干涉。



4

5



**LCIE SUD EST**  
Laboratoire de Moirans  
Z.I. Centr'Alp  
170, Rue de Chatagnon  
38430 MOIRANS - FRANCE

**LCIE**

## 1.2. Tested System Details



Equipment Under Test

### **Power supply:**

During all the tests, EUT is supplied by  $V_{nom}$ : 480Vac/60Hz

For measurement with different voltage, it will be presented in test method.

Name	Type	Rating	Reference / Sn	Comments
Supply1	<input checked="" type="checkbox"/> AC	<b>480Vac 50- 60Hz</b>	/	Configuration n°1 for radiated methode
Supply2	<input checked="" type="checkbox"/> AC	<b>100Vac 50 – 60Hz</b>	/	Configuration n°2 for AC Power Line Conducted Emissions
Supply 2	<input checked="" type="checkbox"/> DC	<b>4.4 VDC</b>	/	Configuration n°3 for conducted methode



**LCIE SUD EST**  
Laboratoire de Moirans  
Z.I. Centr'Alp  
170, Rue de Chatagnon  
38430 MOIRANS - FRANCE

**LCIE**

**Equipment information:**

Type:	<input checked="" type="checkbox"/> ZIGBEE		<input type="checkbox"/> RF4CE	
Spacing channel:	5MHz			
Channel bandwidth:	2MHz			
Antenna Type:	<input checked="" type="checkbox"/> Integral	<input type="checkbox"/> External	<input type="checkbox"/> Dedicated	
Antenna connector:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Temporary for test	
Transmit chains:	1			
	Single antenna			
	Gain: 4.4dBi			
Beam forming gain:	No			
Type of equipment:	<input checked="" type="checkbox"/> Stand-alone	<input type="checkbox"/> Plug-in	<input type="checkbox"/> Combined	
Duty cycle:	<input checked="" type="checkbox"/> Continuous duty	<input type="checkbox"/> Intermittent duty	<input type="checkbox"/> 100% duty	
Equipment type:	<input checked="" type="checkbox"/> Production model		<input type="checkbox"/> Pre-production model	
Type of power source:	<input checked="" type="checkbox"/> AC power supply	<input checked="" type="checkbox"/> DC power supply Used temporary for test	<input type="checkbox"/> Battery	
Operating voltage range:	Vnom:	<input checked="" type="checkbox"/> 480V/60Hz	<input checked="" type="checkbox"/> 4.4Vdc Used temporary for test	

CHANNEL PLAN	
Channel	Frequency (MHz)
<b>Cmin: 11</b>	2405
12	2410
13	2415
14	2420
15	2425
16	2430
17	2435
<b>Cmid: 18</b>	2440
19	2445
20	2450
21	2455
22	2460
23	2465
24	2470
25	2475
<b>Cmax: 26</b>	2480

DATA RATE		
Data Rate (Mbps)	Modulation Type	Worst Case Modulation
0.25	O-QPSK	<input checked="" type="checkbox"/>



## **LCIE SUD EST**

Laboratoire de Moirans

Z.I. Centr'Alp

170, Rue de Chatagnon

38430 MOIRANS - FRANCE

**LCIE**

### **1.3. Test Methodology**

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 or/and ANSI C63.10, FCC Part 15 SubPart 15C.

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

### **1.4. Test facility**

Tests have been performed: **August 07, 2024 to August 12, 2024**

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4 or/and ANSI C63.10.

This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55032/CISPR32 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.