

An aerial photograph of a city skyline at dusk. The sky is dark with some light clouds, and the sun is setting on the horizon, creating a warm glow. In the foreground, there is a large, curved, metallic structure that looks like a stadium roof or a large architectural element. The city skyline is filled with tall buildings, including a prominent skyscraper in the center. The word "GROWATT" is overlaid on the image in a large, bold, sans-serif font. The letter "G" is bright green, while the rest of the letters are a light gray color.

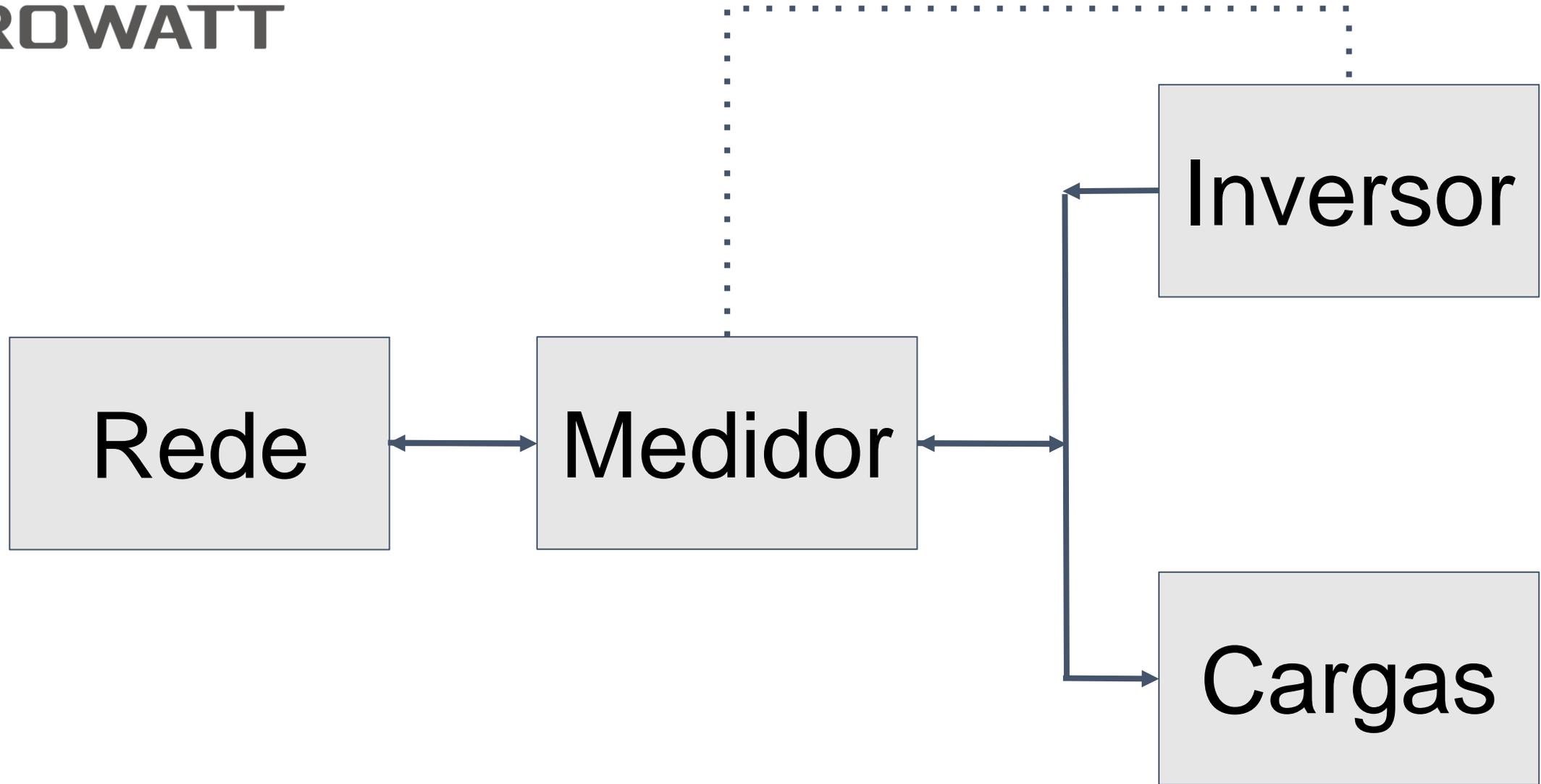
GROWATT

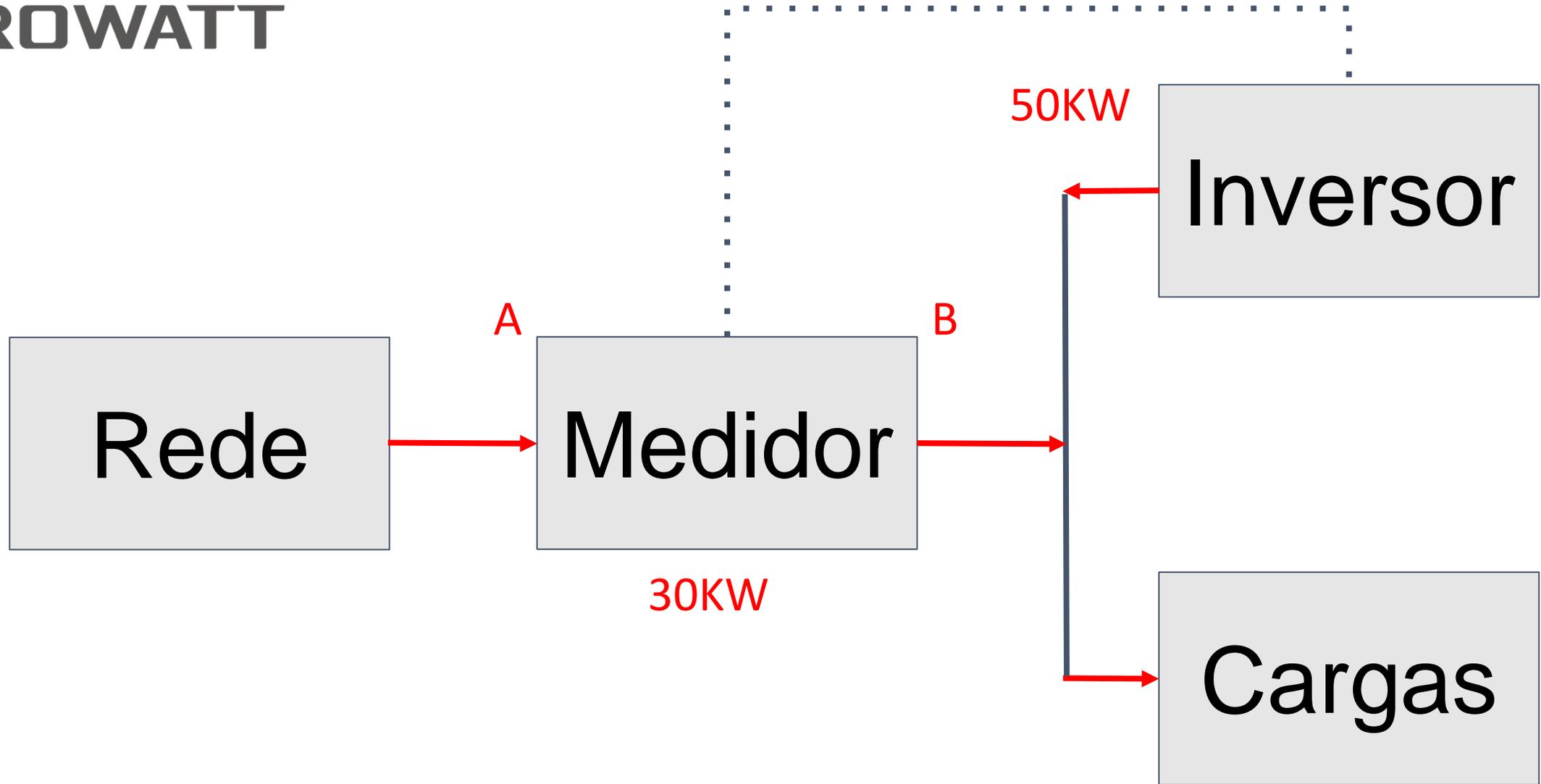


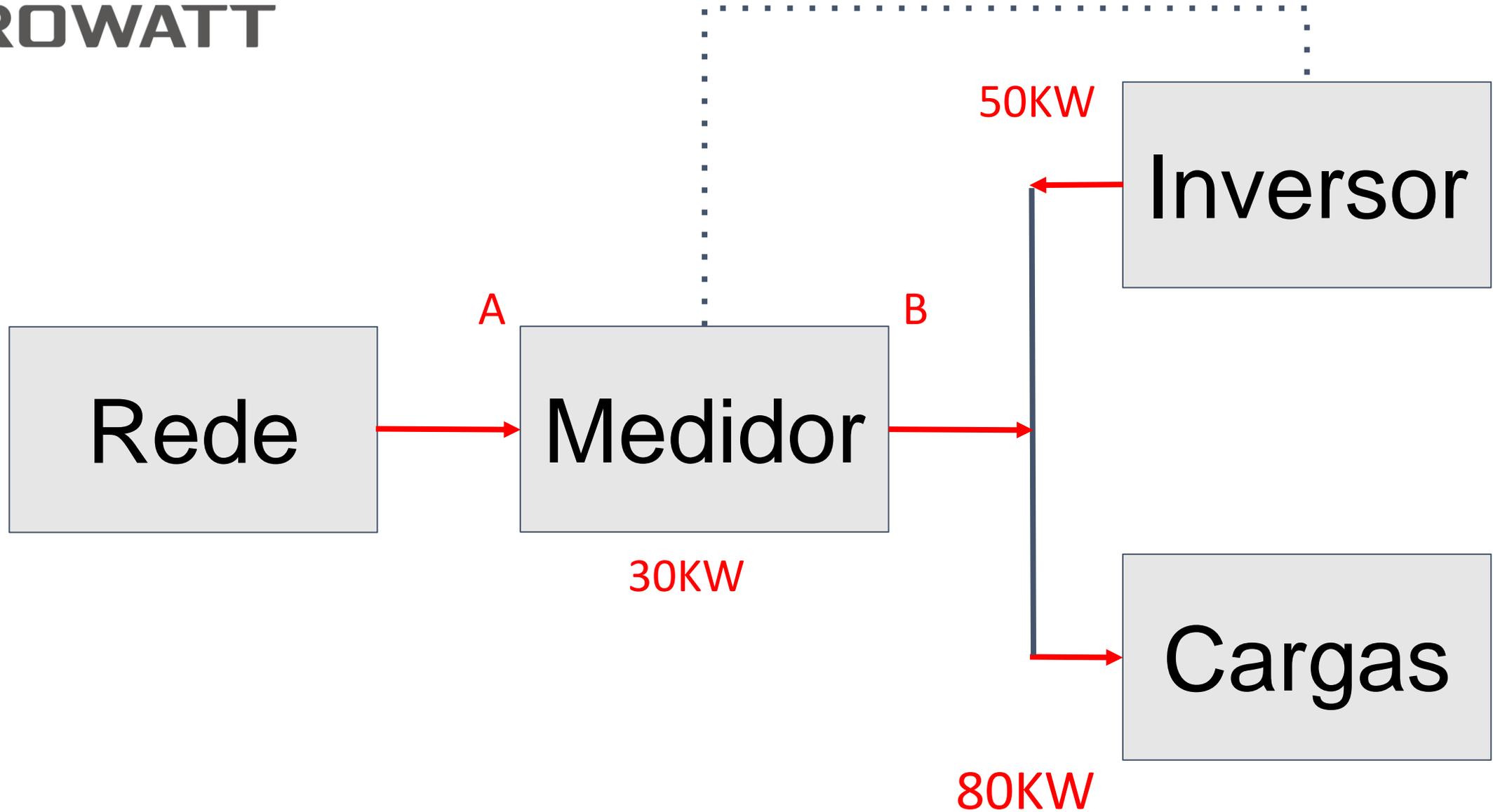
Smart Energy Manager

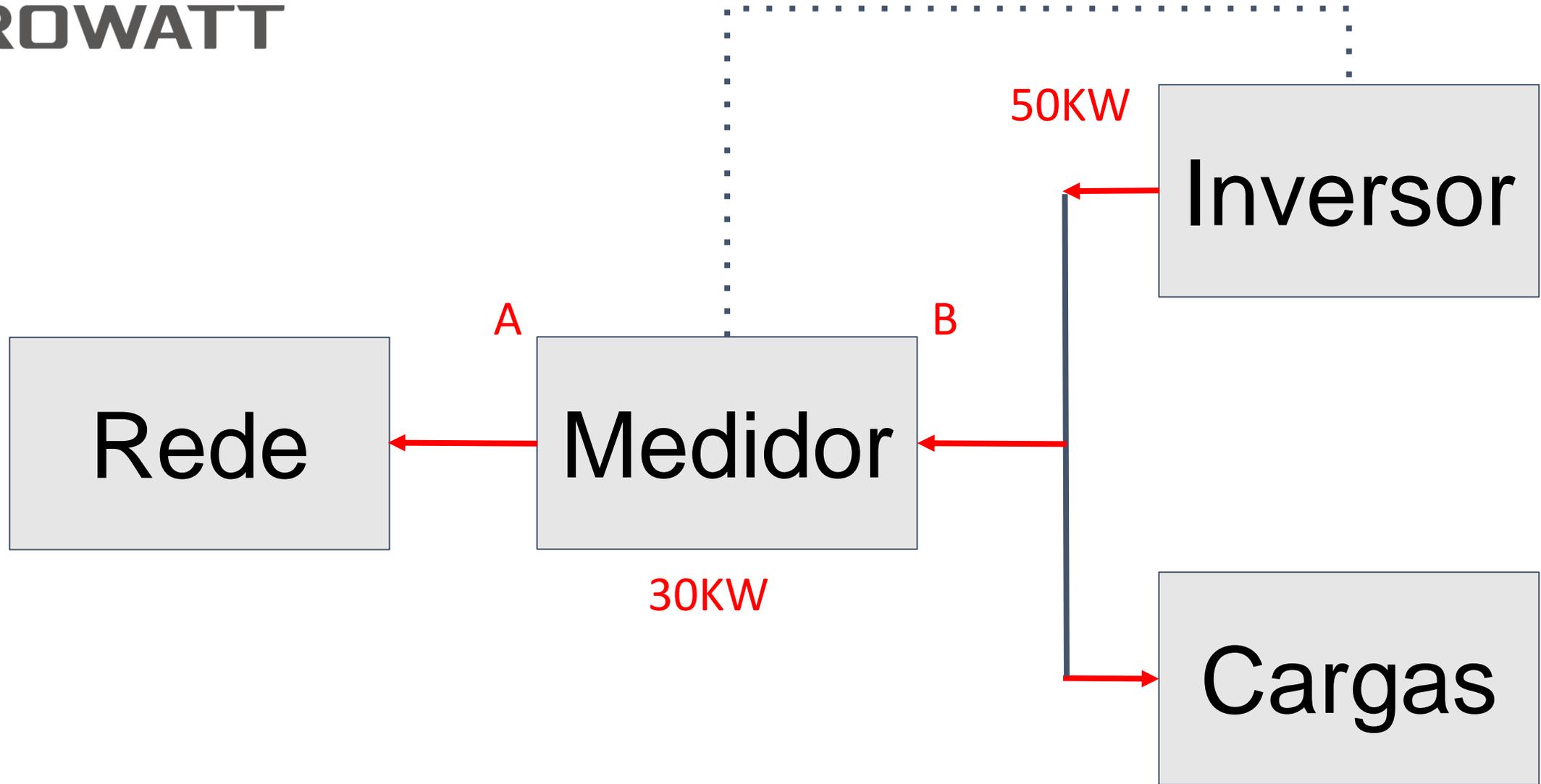


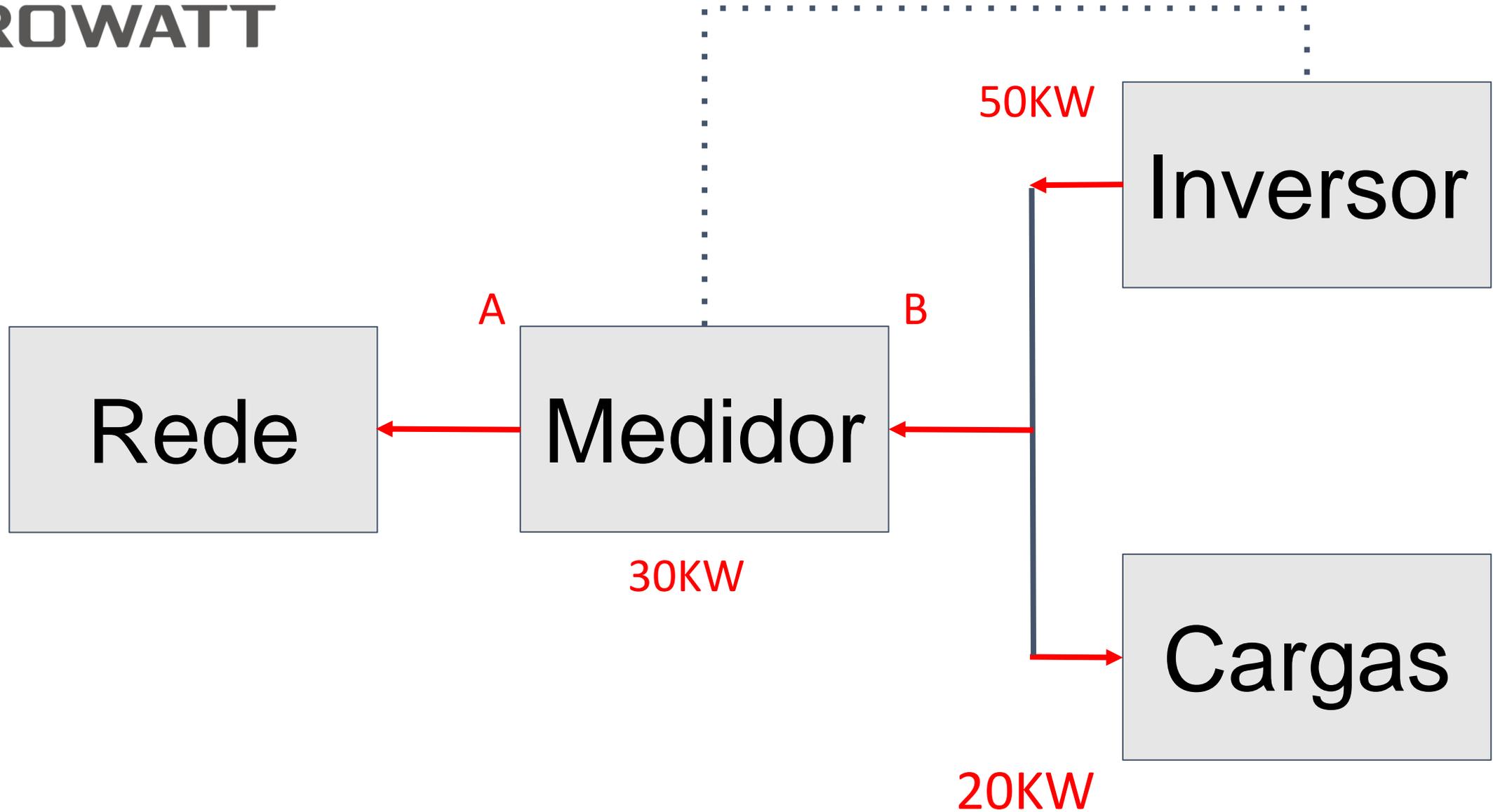
Medidor Bidirecional



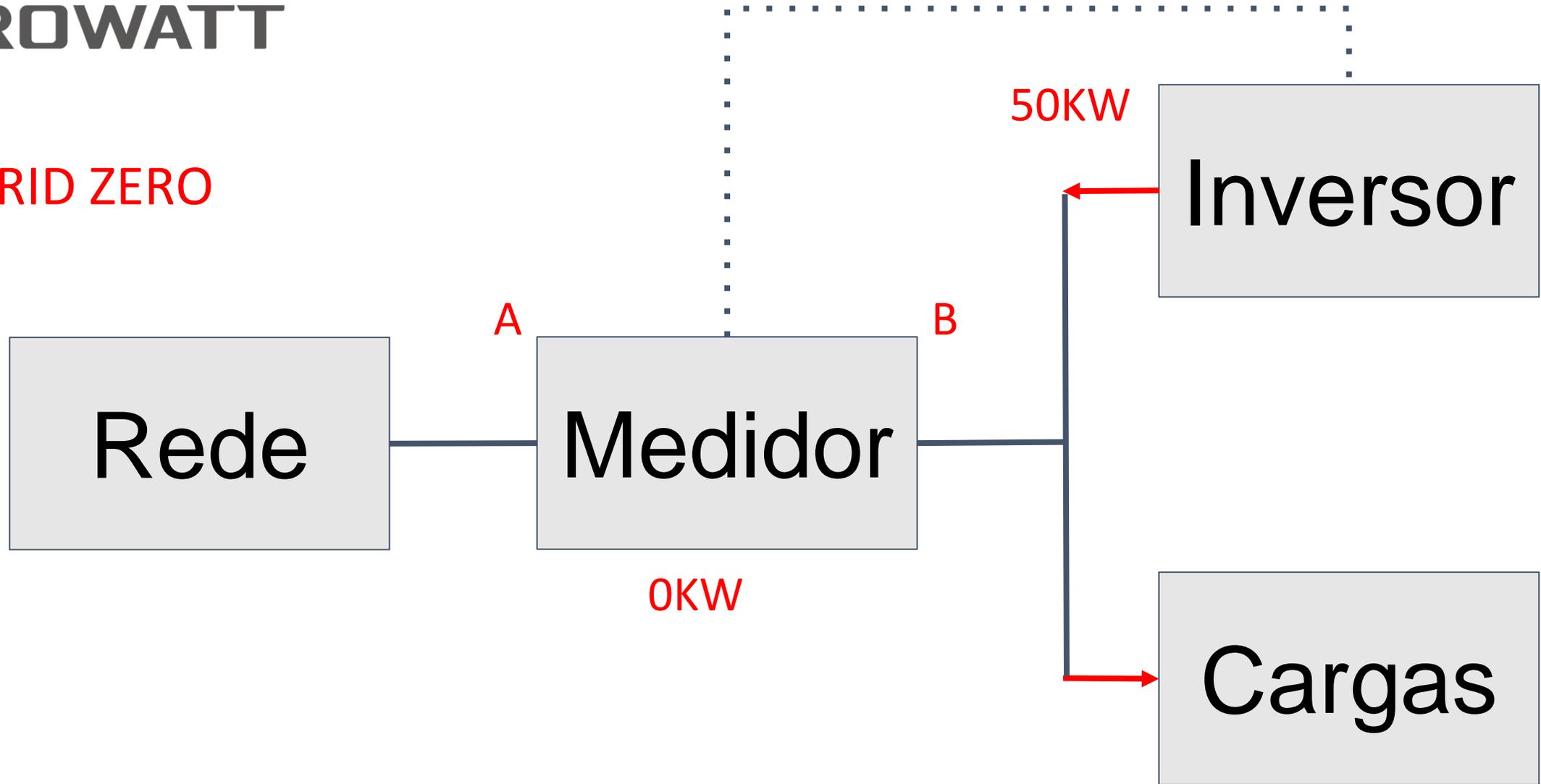




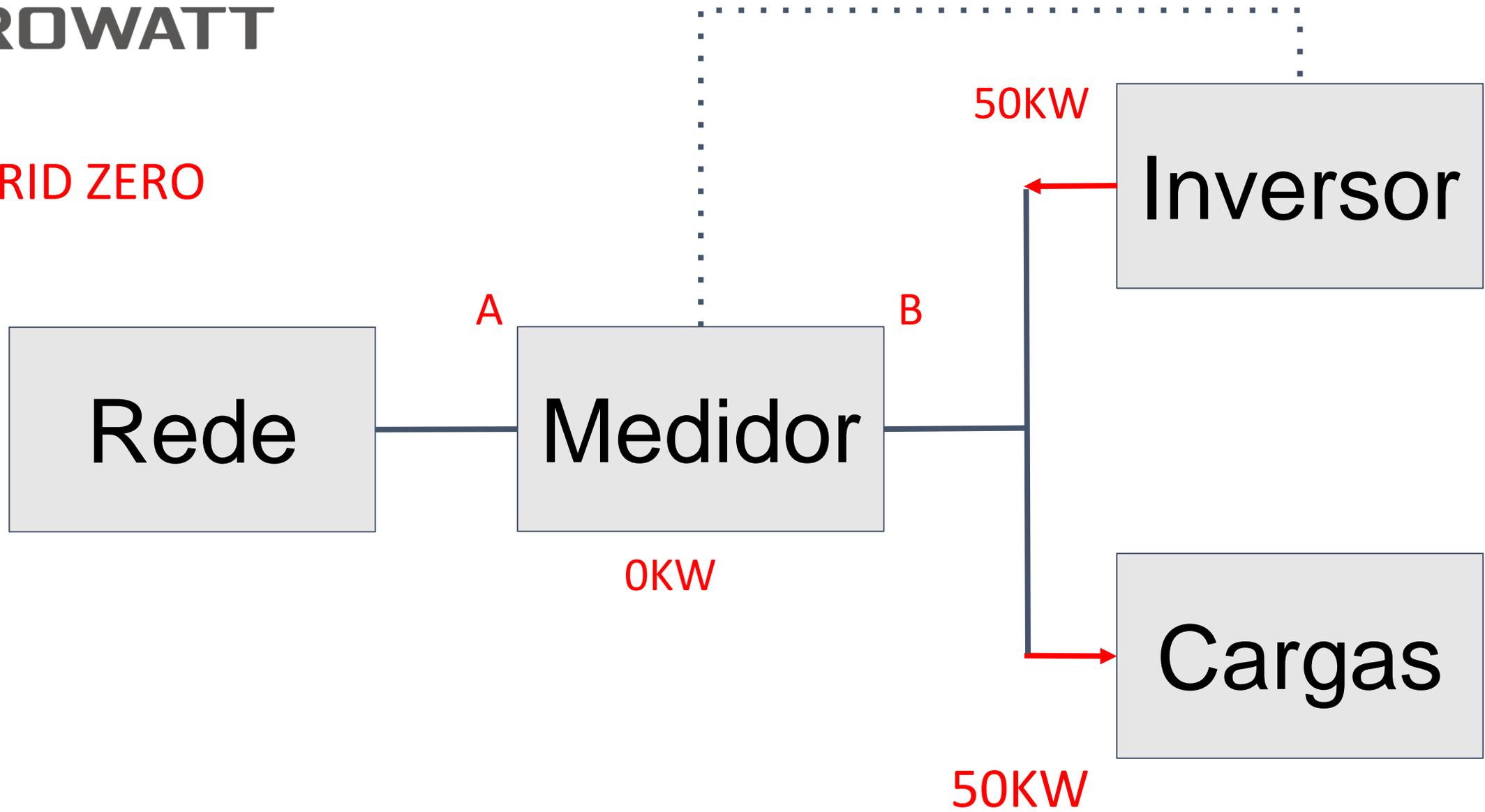




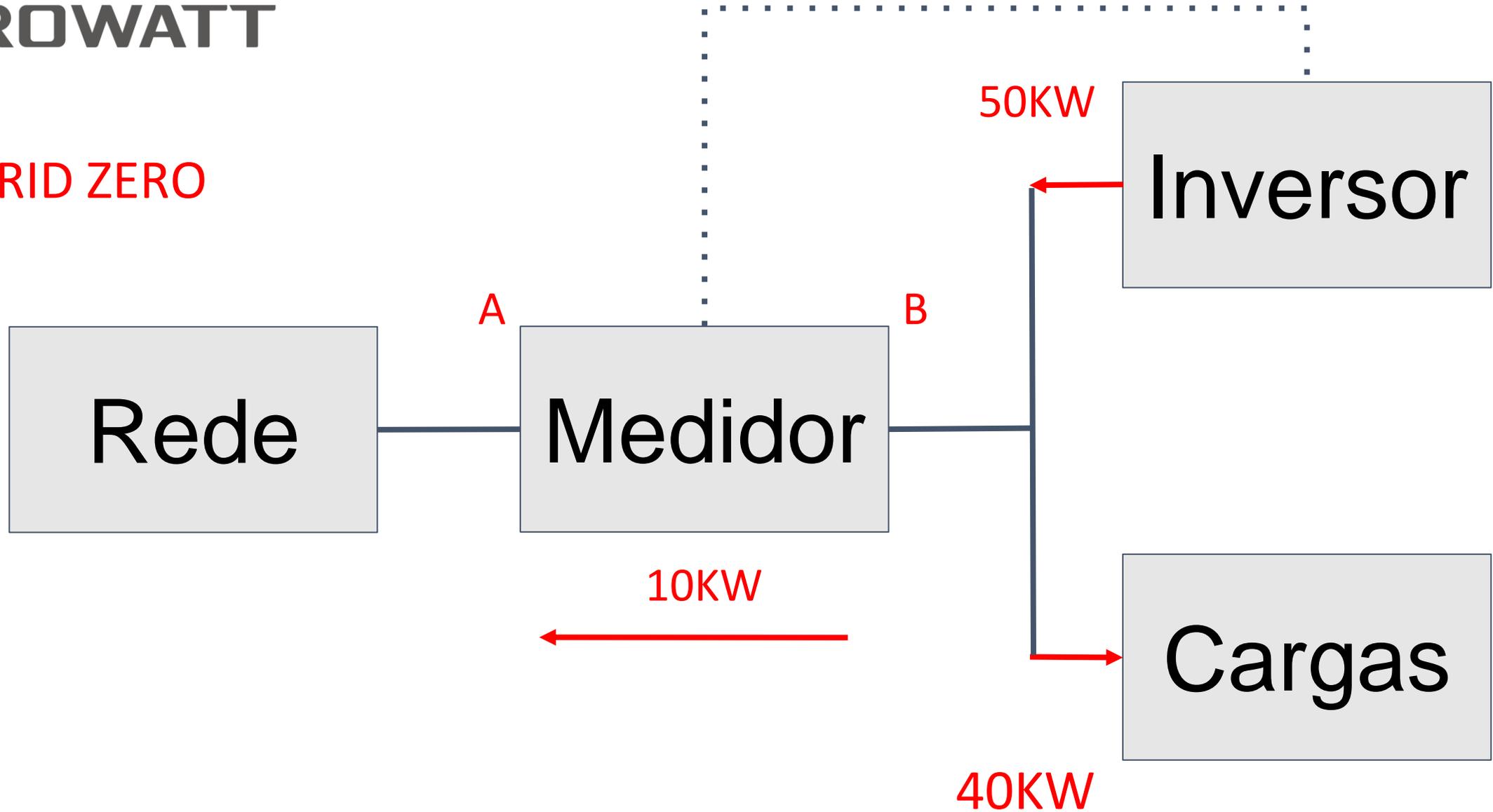
GRID ZERO



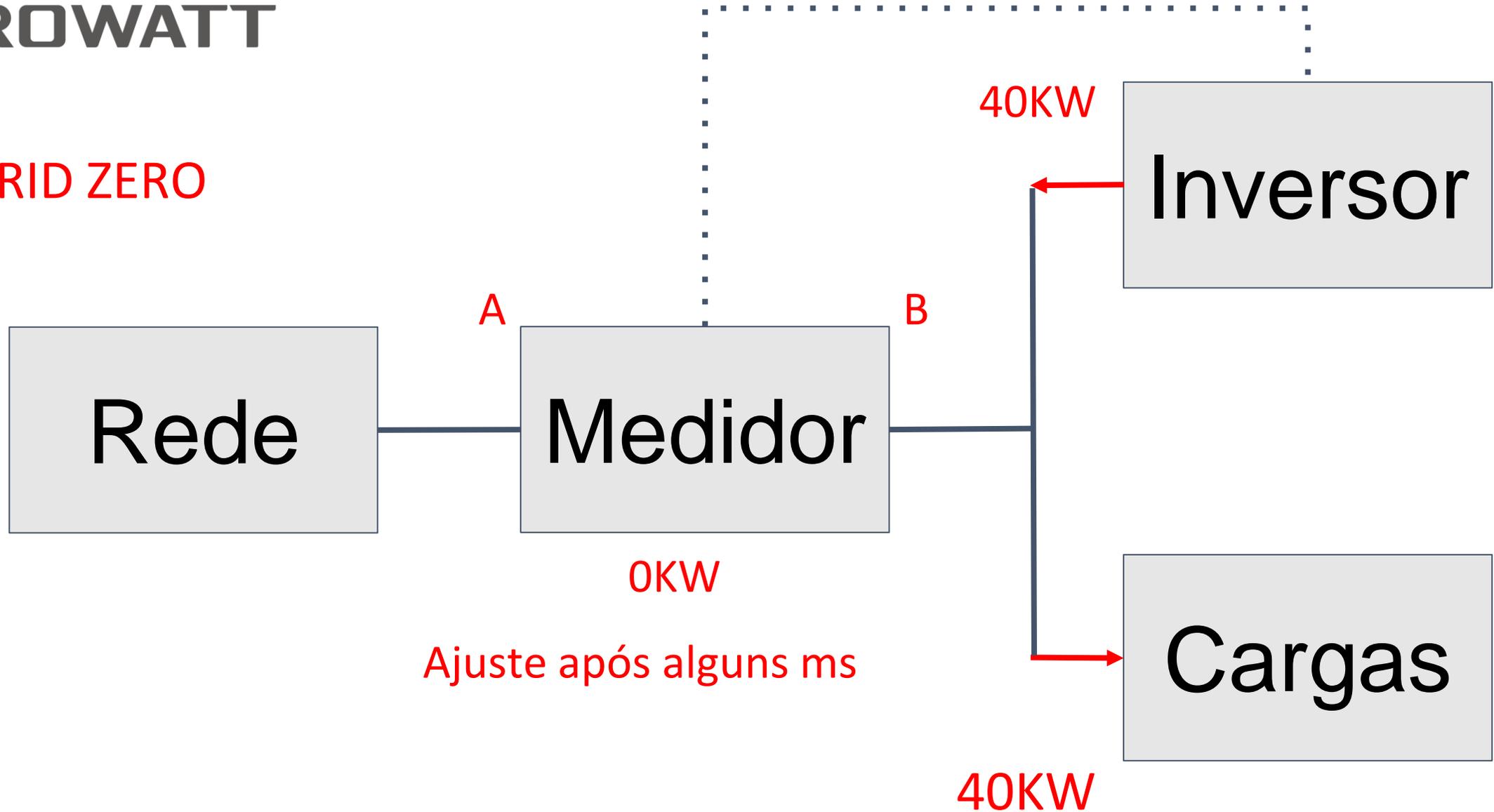
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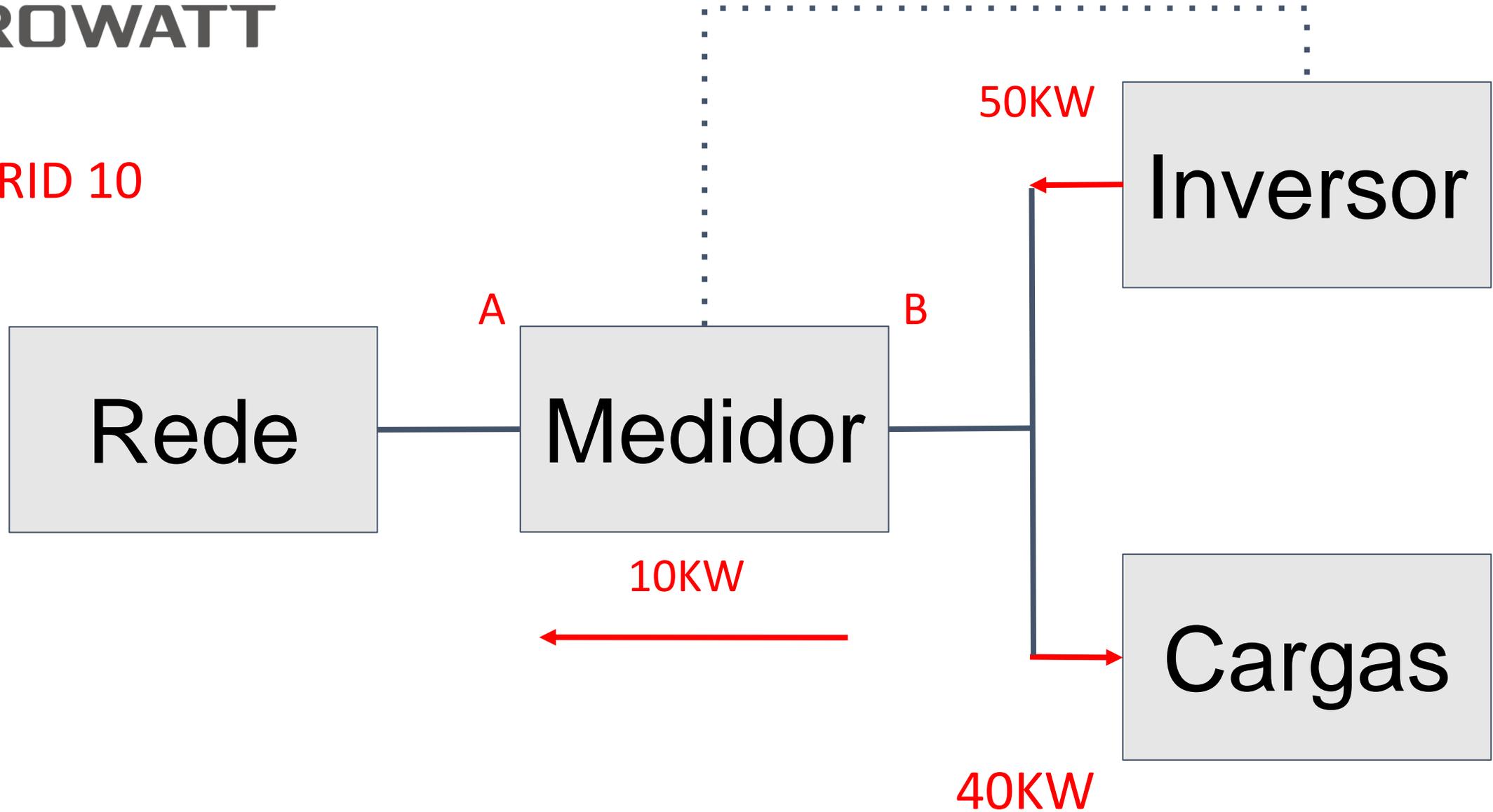
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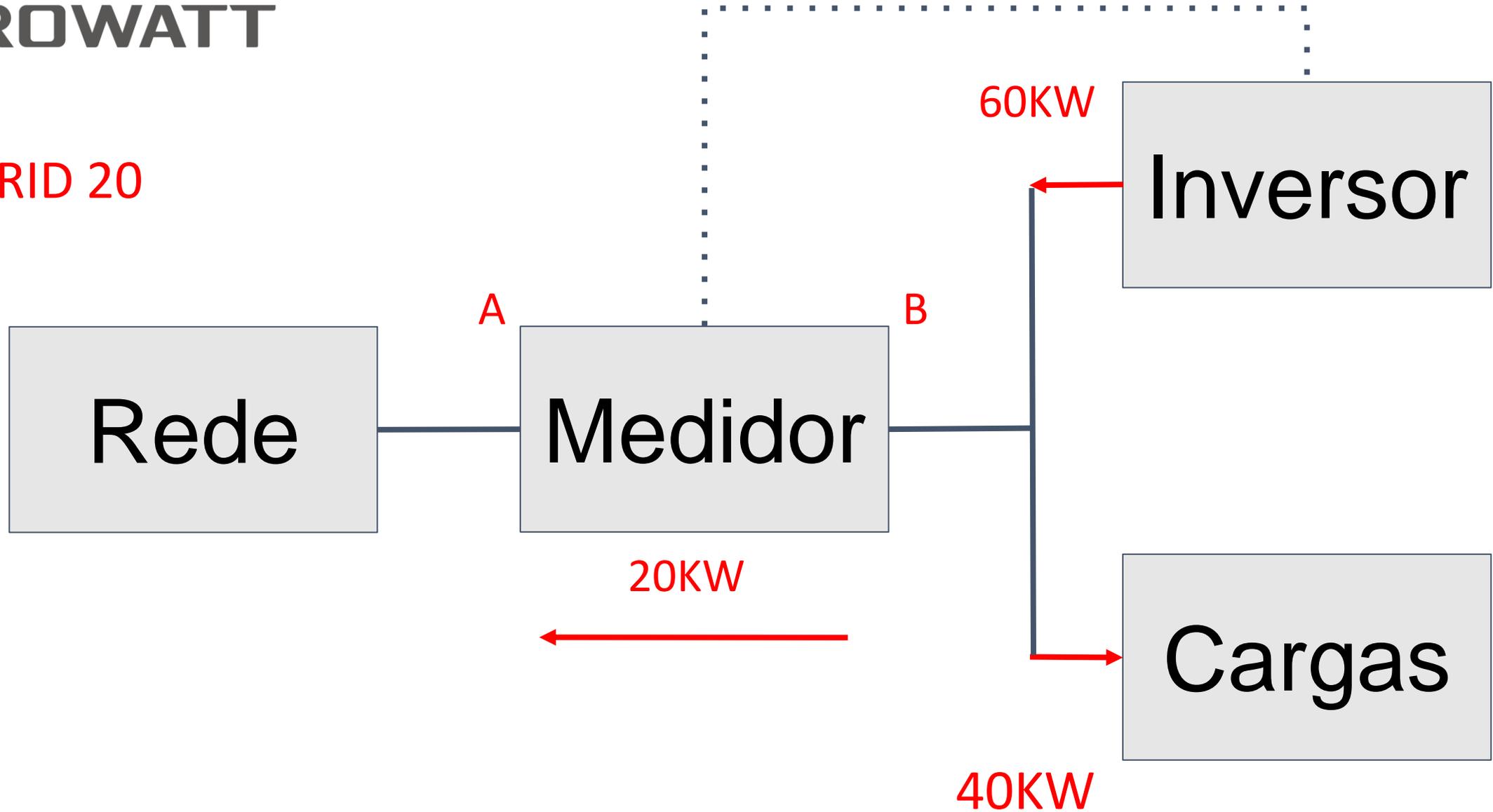
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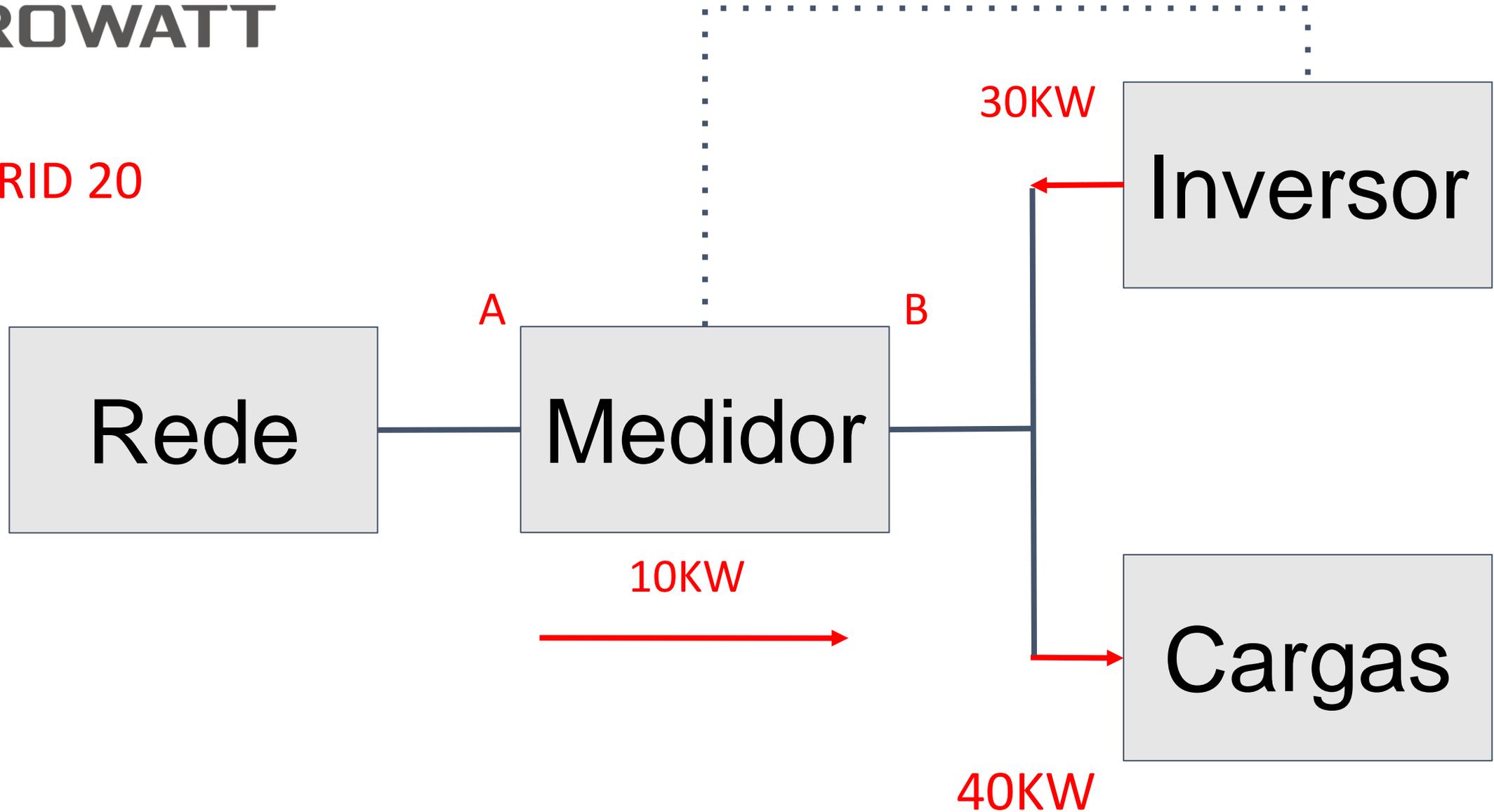
GRID 10



GRID 20



GRID 20





Medidor Bidirecional

- Monitorar apenas 1 inversor
- Medição Direta
- Comunicação Modbus RS485
- Máximo 100A (verificar disjuntor principal)
- Cabo menor que 5,64mm
- Compatível com MIC, MIN, MID* e MAC*

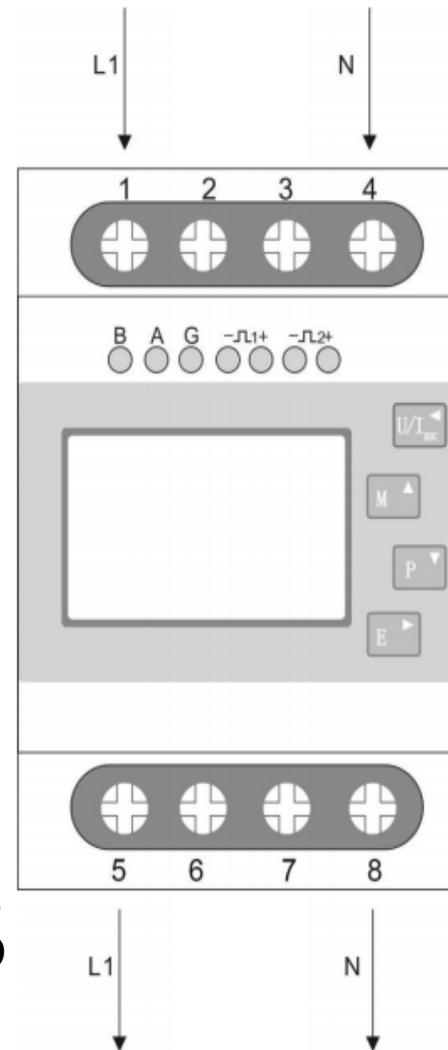


Medidor Bidirecional

REDE

Monofásico

CARGAS



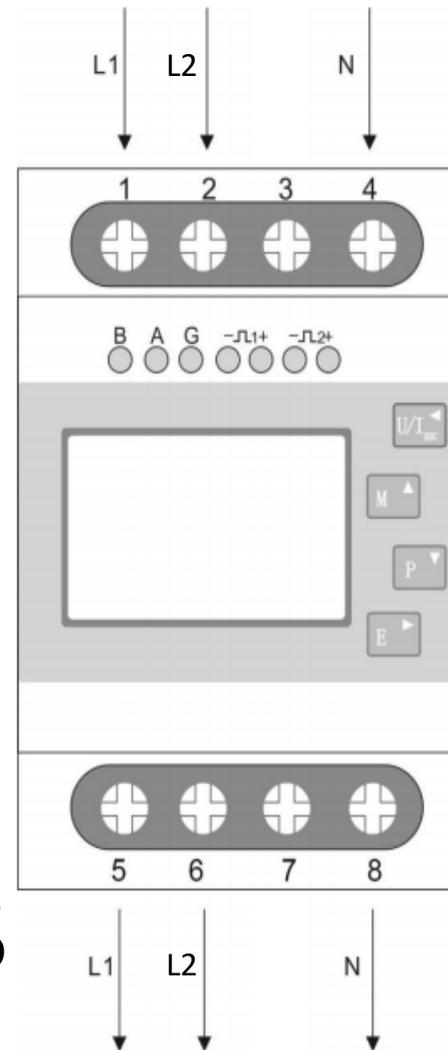


Medidor Bidirecional

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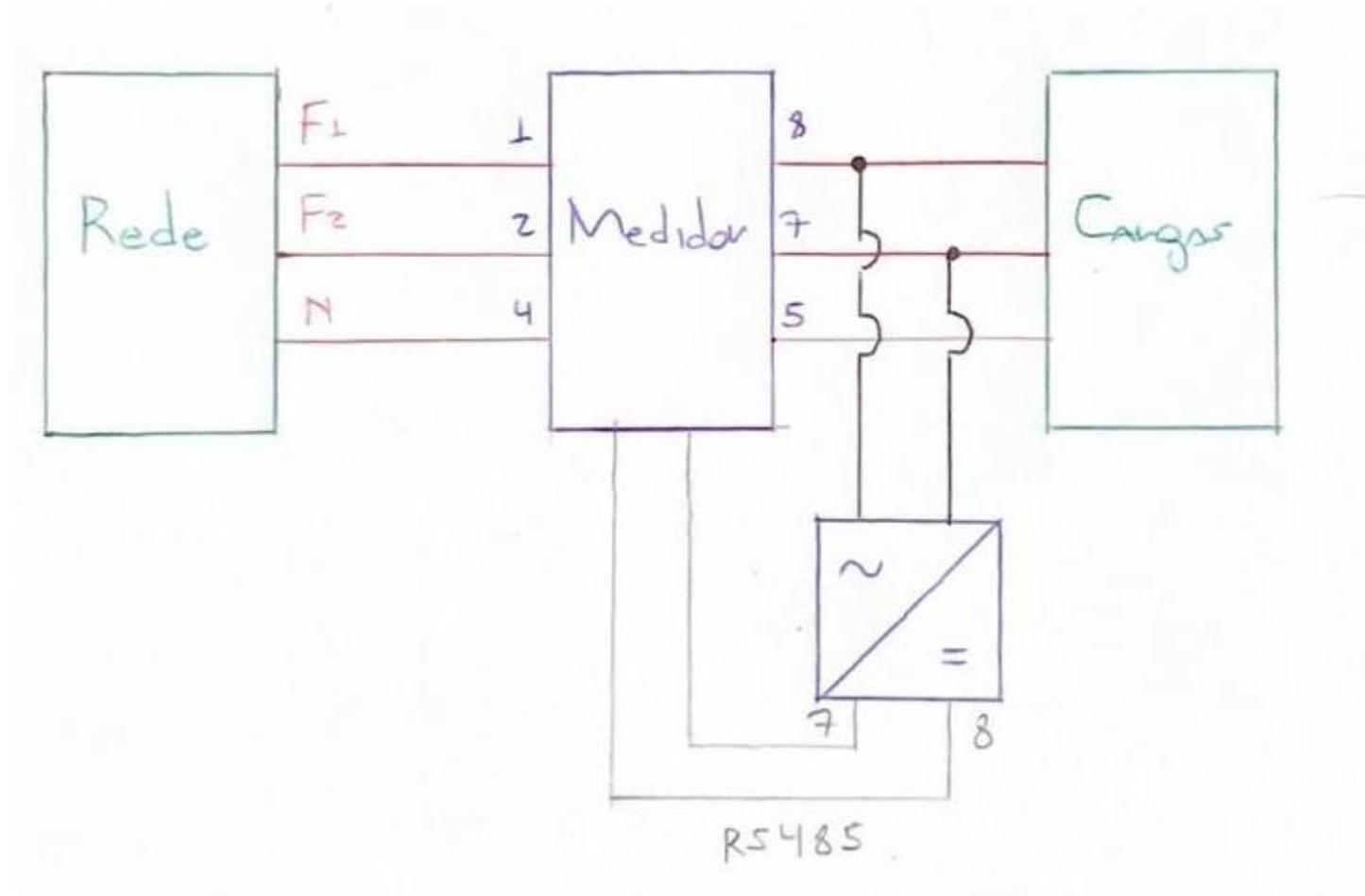
Bifásico

CARGAS





Medidor Bidirecional



GROWATT

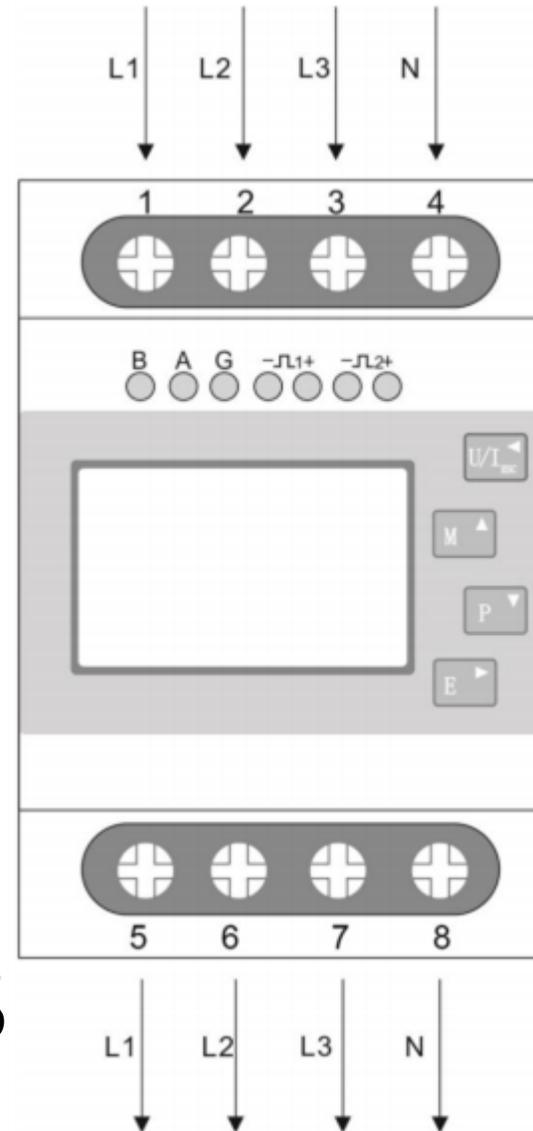


Medidor Bidirecional

Trifásico

REDE

CARGAS

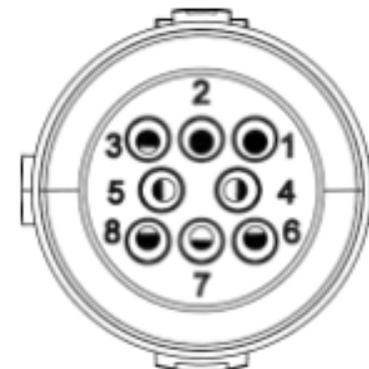


MIC 1000-3000TL-X MIN 3000, 5000, 6000TL-X



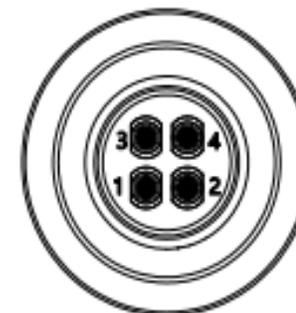
Medidor Bidirecional

Nº	Definição		Nº	Definição	
1	N/A	Este pino não é de sinal	5	TC	Sinal para limitação de exportação (opcional)
2	N/A		6	TC	
3	RS485A1	Sinal para comunicação	7	RS485A2	Sinal para Smart Meter
4	RS485B1		8	RS485B2	



MIN 10000TL-X

N.º	Definição	
1	RS485A1	RS485 para comunicação
2	RS485B1	
3	RS485A2	RS485 para medidor inteligente
4	RS485A2	



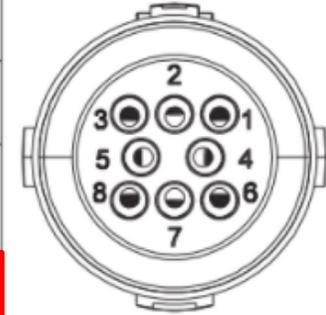
MID 15K, 20K, 25KTL3-X



Medidor Bidirecional



Número de Série:	Função	Número de Série:	Função
1	Contato SECO +	2	Contato SECO -
3	RS485A1 + (Sinal para monitor)	4	RS485B1- (Sinal para monitor)
5	AntiReFlux-A (RS485A para medidor)	6	AntiReFlux-B (RS485B para medidor)



MAC 60KTL3-X



Medidor Bidirecional

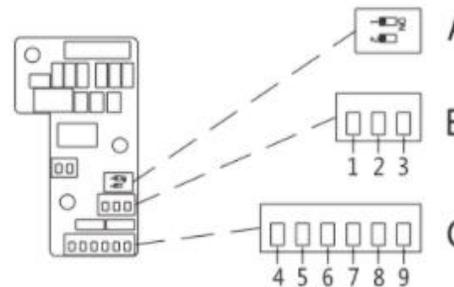
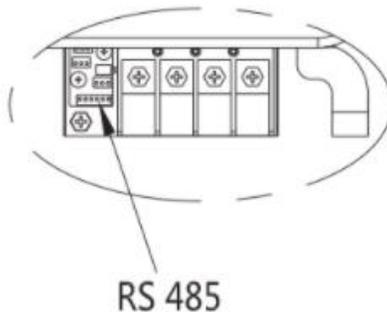


Figura 6.5



Nº	Definição	Descrição
1	RS485B2	RS485A2/B2: Porta de comunicação anti-refluxo, conectado ao medidor inteligente
2	GND	
3	RS485A2	
4 / 7	RS485B1	RS485A1/B1: O cliente usa a porta de comunicação para conectar-se ao equipamento de monitoramento de terceiros
5 / 8	GND	
6 / 9	RS485A1	



Medidor Bidirecional

Registradores:

122 = habilitar o controle de exportação

122 = 1

123 = potência máxima a ser exportada

123 = 0-1000 (0-100%)

304 = potência de falha de comunicação

304 = 0 - 1000 (0-100%)

307 = tempo limite de falha de comunicação

307 = 1 - 5000s

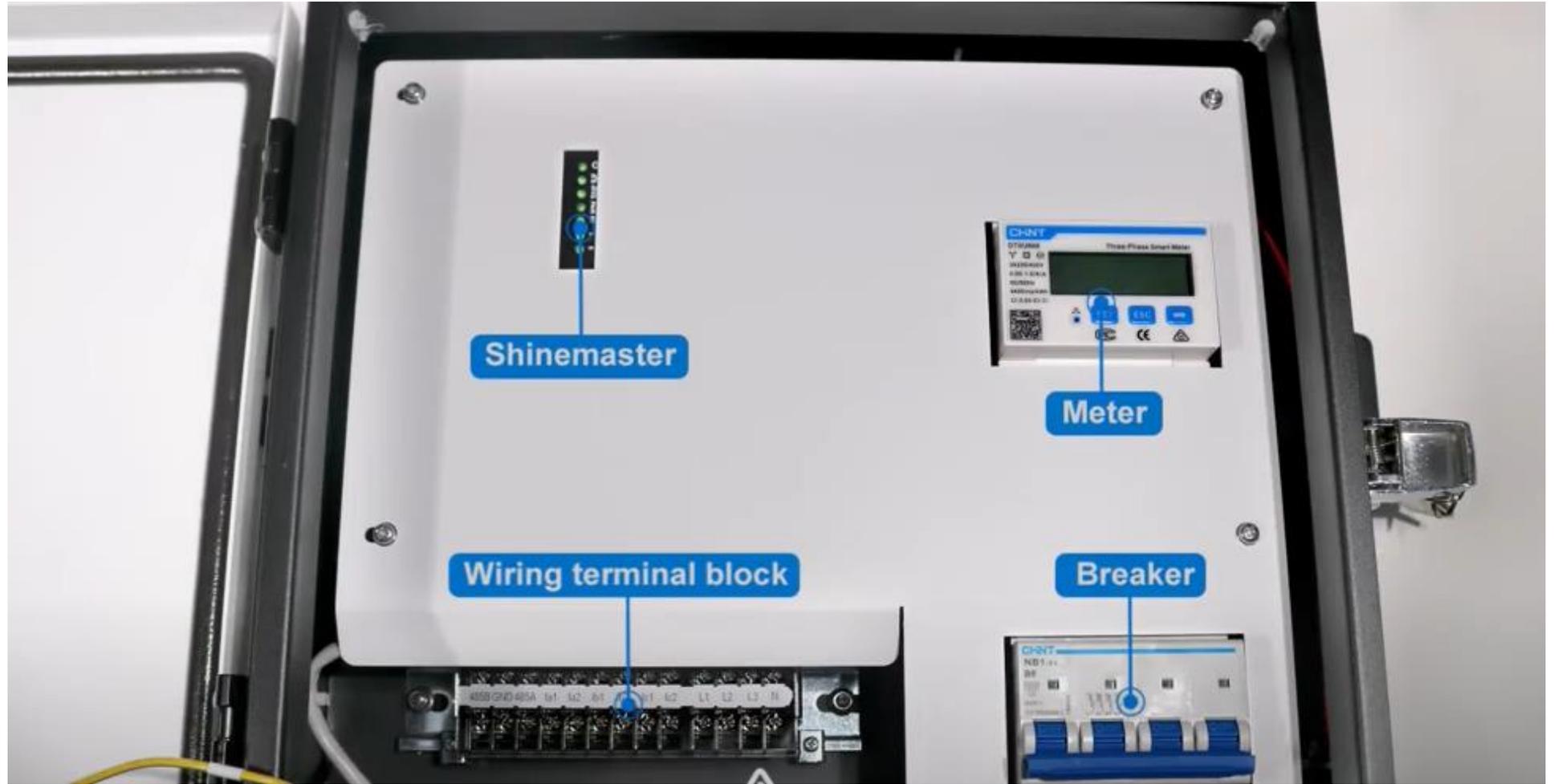


Smart Energy Manager

- Monitorar até 32 inversores
- Medição Indireta
- Comunicação Modbus RS485
- Verificar TC de acordo com padrão de entrada ou projeto
- Compatível com MID, MAC e MAX

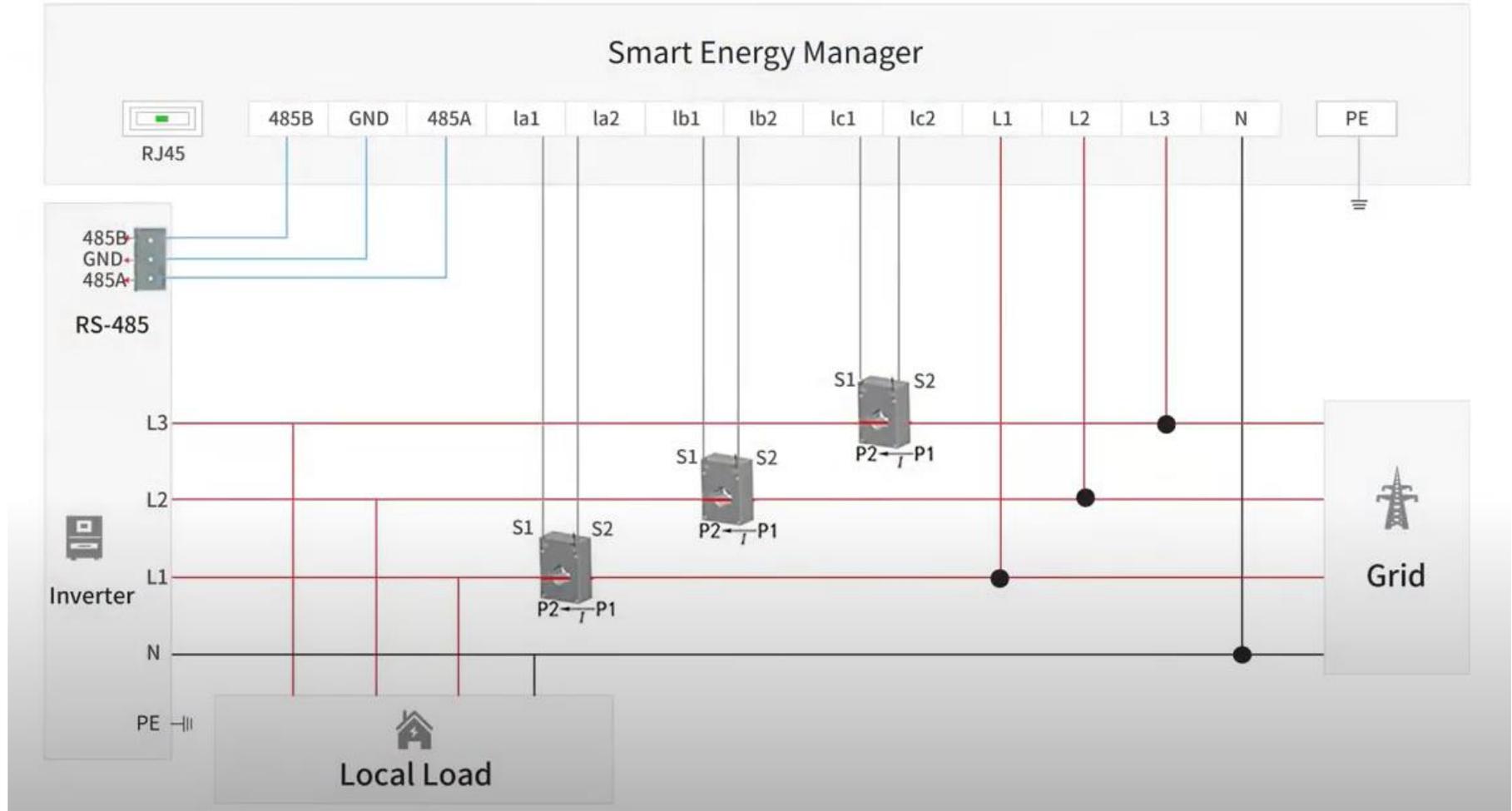


Smart Energy Manager



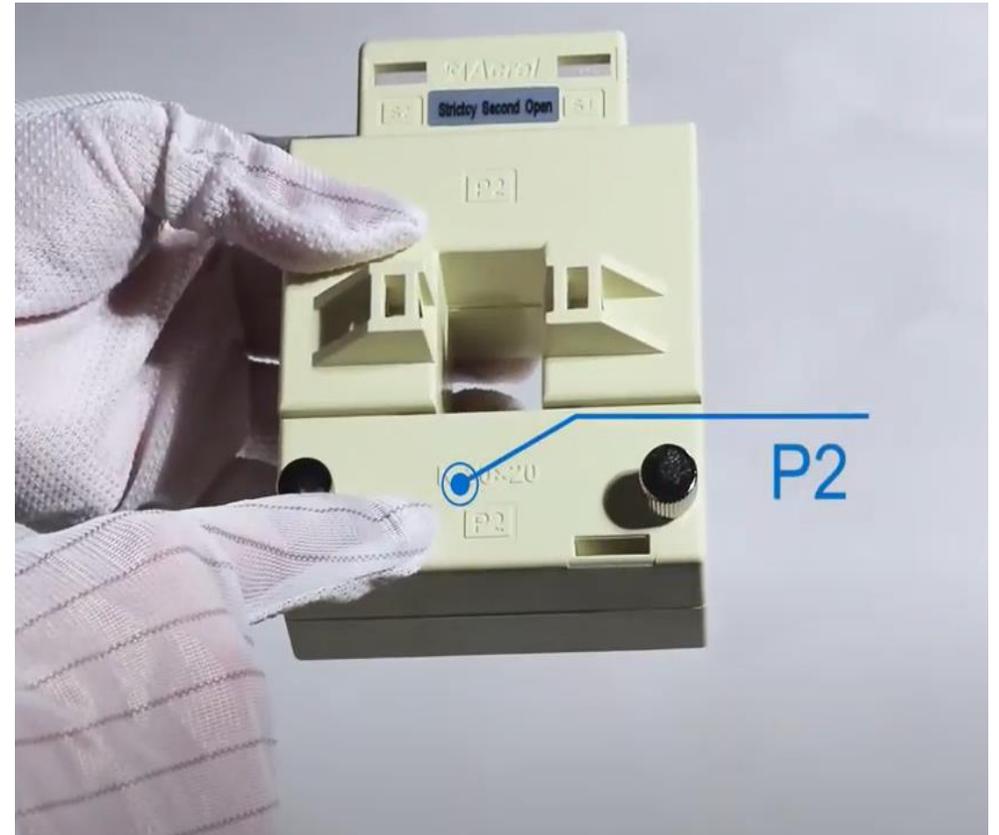
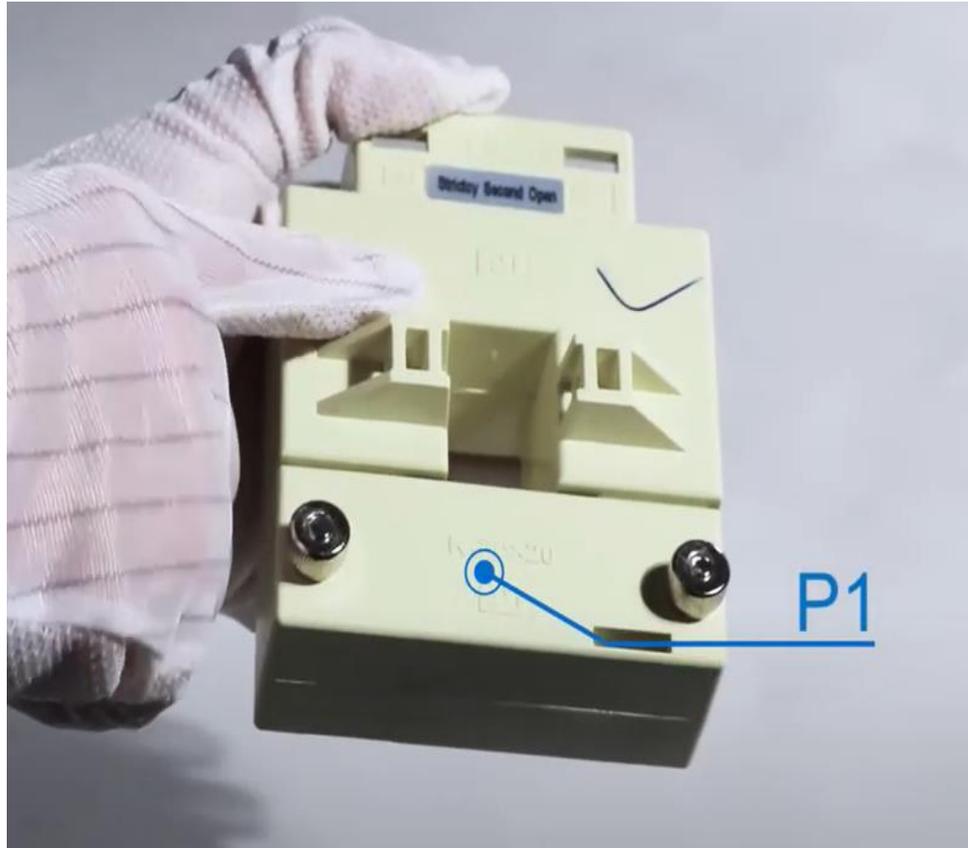


Smart Energy Manager





Smart Energy Manager



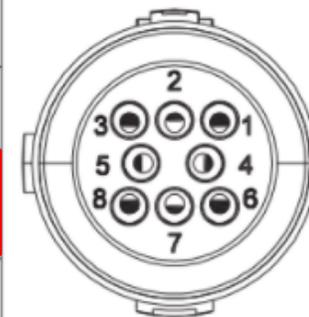
MID 15K, 20K, 25KTL3-X



Smart Energy Manager



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3	RS485A1 + (Sinal para monitor)	4	RS485B1- (Sinal para monitor)
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MAC 60KTL3-X



Smart Energy Manager

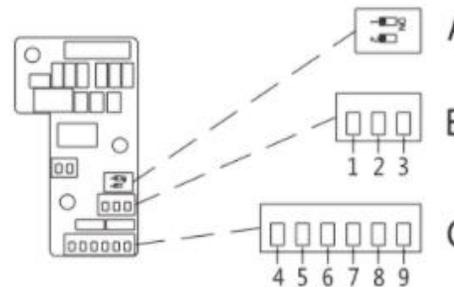
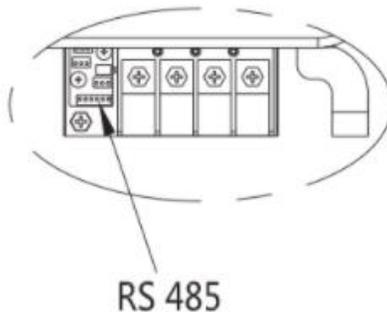
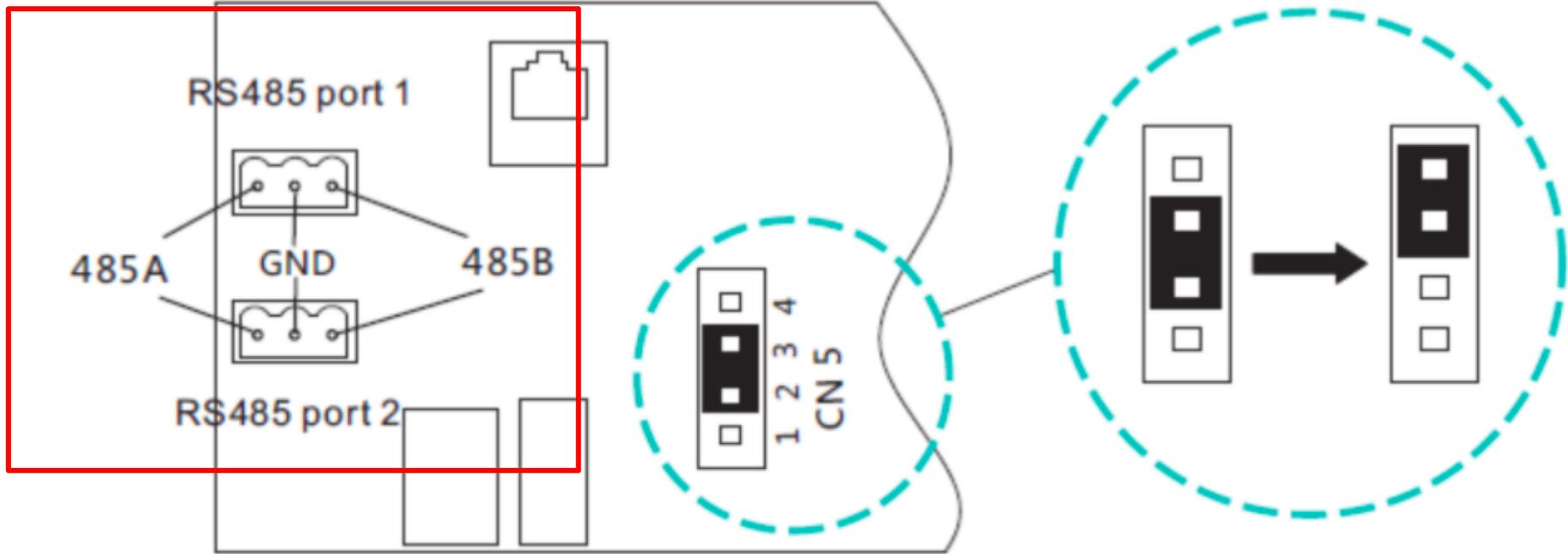


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1	RS485B2	RS485A2/B2: Porta de comunicação anti-refluxo, conectado ao medidor inteligente
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3	RS485A2	
4 / 7	RS485B1	RS485A1/B1: O cliente usa a porta de comunicação para conectar-se ao equipamento de monitoramento de terceiros
5 / 8	GND	
6 / 9	RS485A1	



Smart Energy Manager





Smart Energy Manager

ExportLimit & Datalogger setting	
Network Mode	LAN ▾
ExportLimit Function	<input type="radio"/> ON <input checked="" type="radio"/> OFF
MeterChannel	RS485_2 ▾
Meter Address	4 (Input Meter Addr)
ExportLimit Power(kw)	0 (XX:Export, -XX:Import)
Fallback activated	<input type="radio"/> ON <input checked="" type="radio"/> OFF
Active Power	10 % (0 - 100)%
Fallback activates after	120 S (10 ~ 5000)S
Datalogger Time(YYYYMM-DD HH:MM:SS)	2019-10-17 16:23:55 <input type="button" value="Get Local Time"/>
Reboot	<input type="radio"/> Yes <input checked="" type="radio"/> No
Add or delete devices	RS485_1 ▾ INVERTER ▾ 1 <input checked="" type="radio"/> Add <input type="radio"/> Del
Set BaudRate	NULL ▾ <input type="radio"/> RS485_1 <input type="radio"/> RS485_2
Update firmware	<input type="radio"/> Yes <input checked="" type="radio"/> No

Solução de Problemas



Medidor Bidirecional

Warning 401	Comunicação do Inversor com o medidor anormal	1: Verifique se o medidor está ligado. 2: Verifique se a conexão do inversor com o medidor está normal
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Smart Energy Manager

Device Addr	Device Type	Device SN	Device State	communication mode
001	Inverter		Suspend	RS485_1
004	CHNT_DTSU666		Suspend	RS485_2

Solução de Problemas

ERRO DE
COMUNICAÇÃO



Problema RS485



- 1) Verificar se a porta COM do inversor está correta.
- 2) Verificar se o endereço COM dos inversores está correto
- 3) Verificar se a instalação do RS485 está correta (A com A, B com B e GND com GND).
- 4) Verificar a continuidade (apito) entre os pontos do RS485
- 5) Interligar o pino GND do Shine Master no PE (terra) da carcaça.
- 6) Verificar se o distância máxima de 500m
- 7) Verificar se o resistor está posicionado corretamente
- 8) Verificar se o cabo blindado está correto
- 9) No caso do Smart Energy Manager, verificar se o registro 180 ou 122 não estão habilitados (122 e 180 tem que ficar iguais a 0).

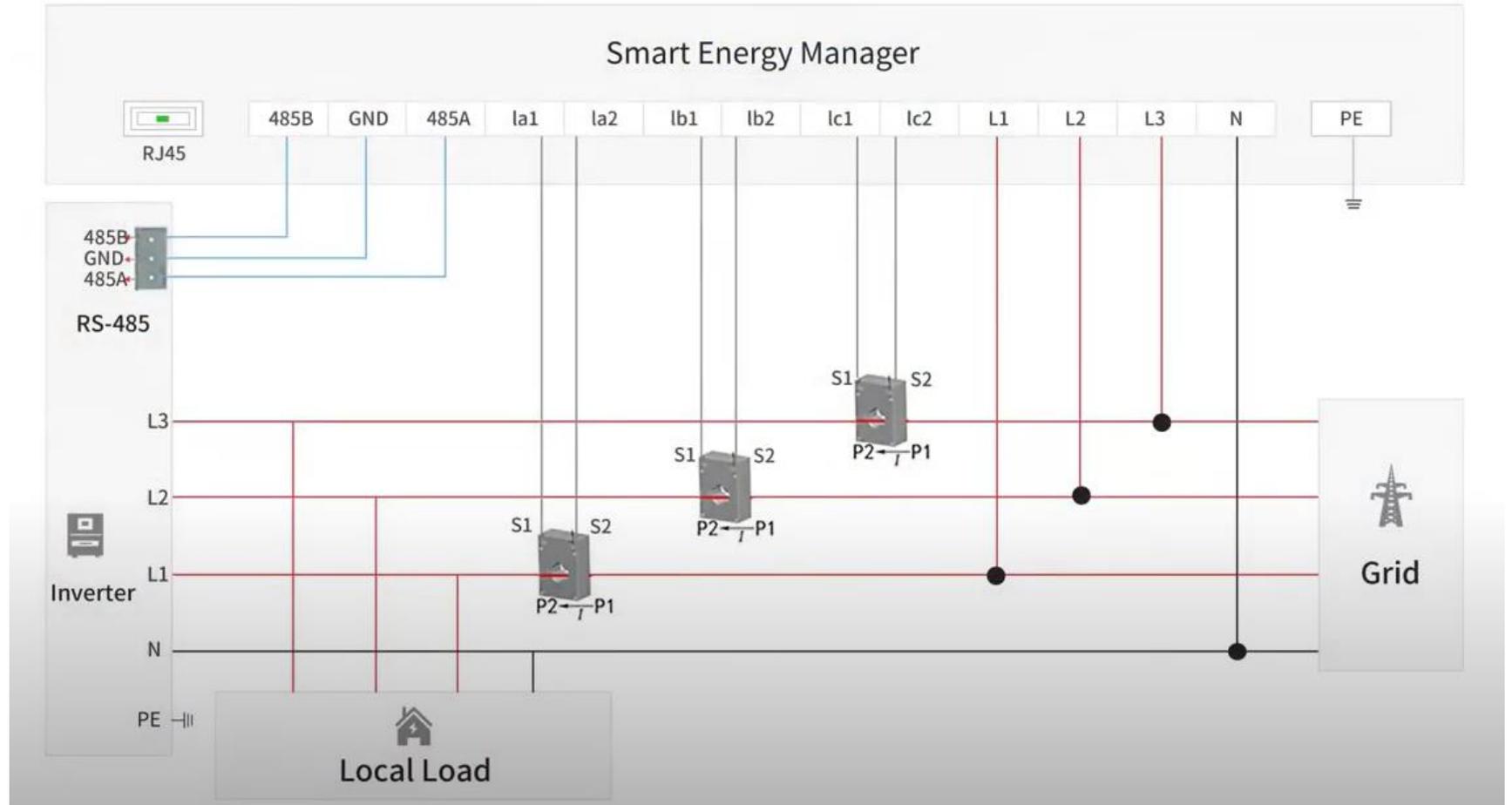


Solução de Problemas

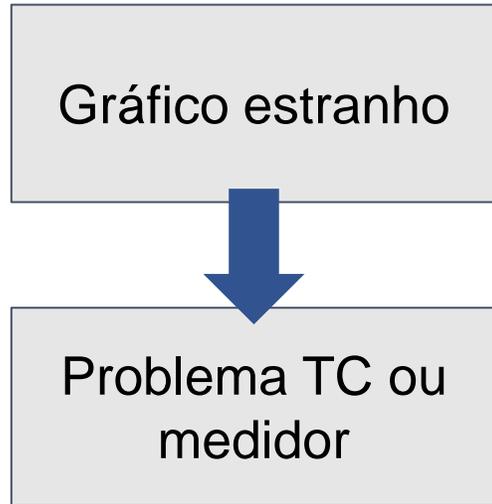
Gráfico estranho



Problema TC ou medidor



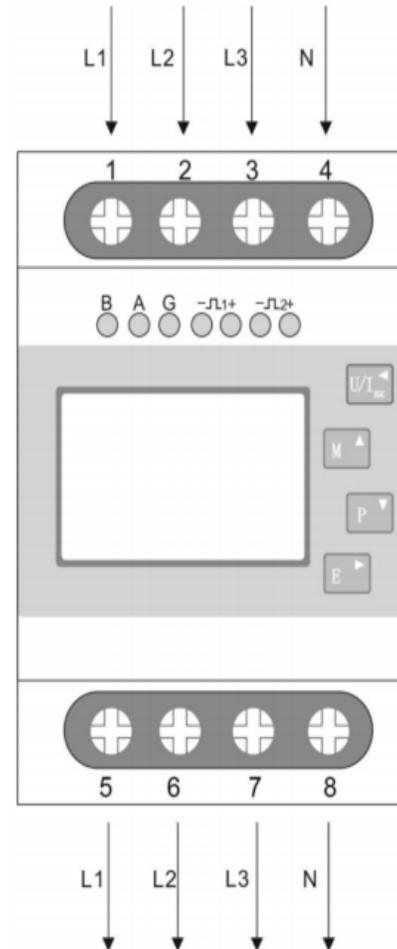
Solução de Problemas



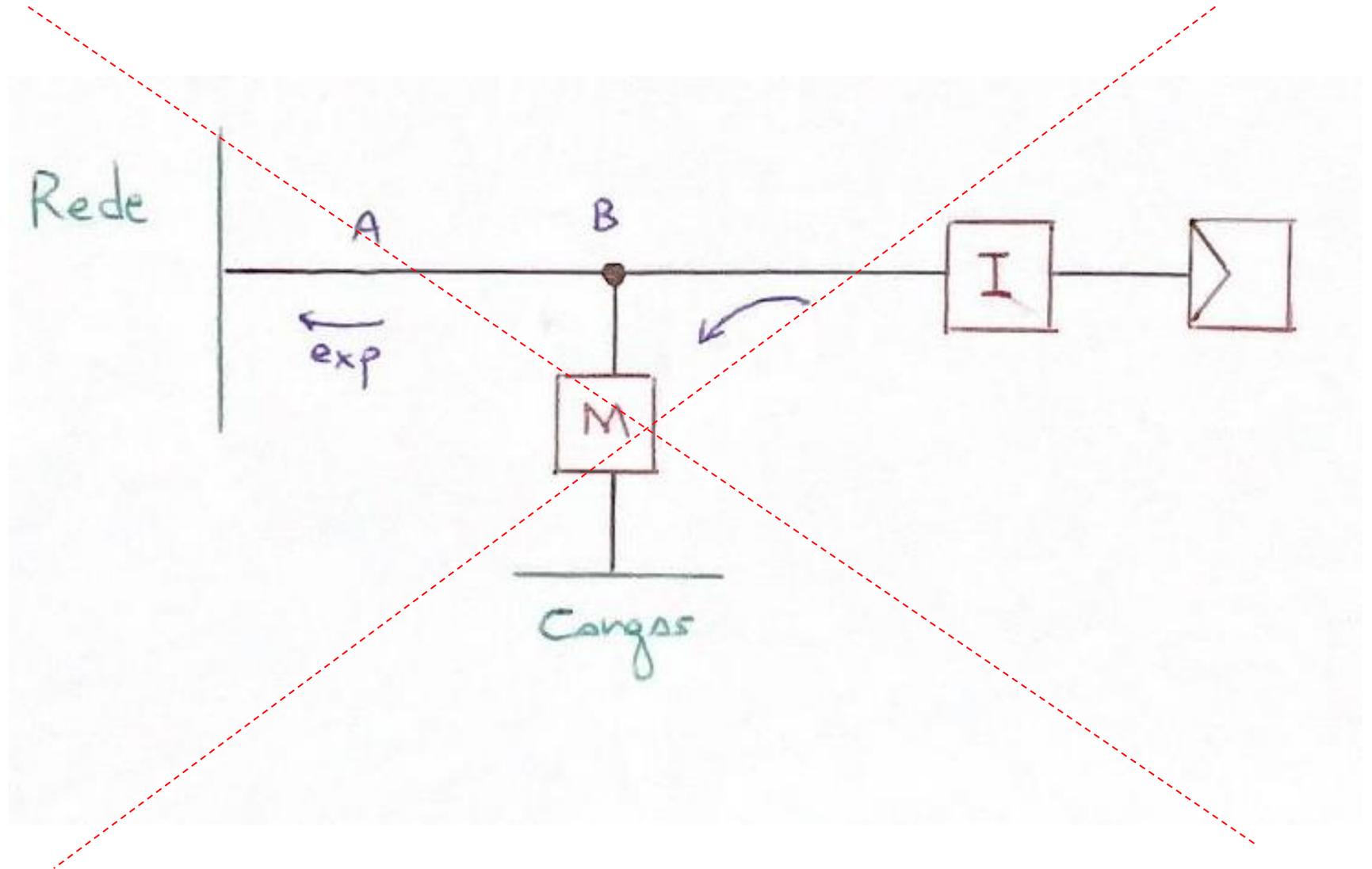
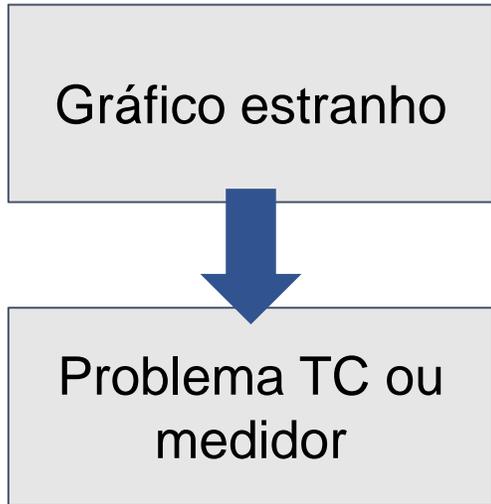
REDE

Trifásico

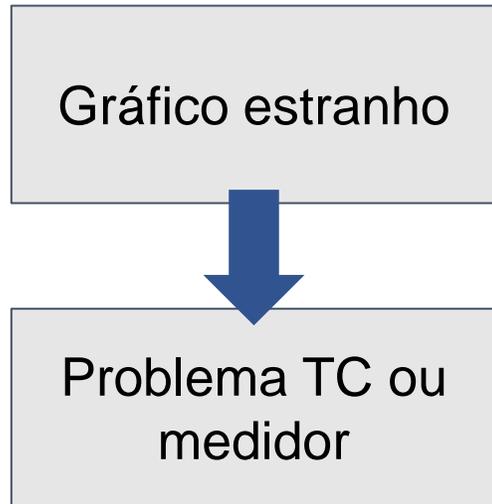
CARGAS



Solução de Problemas



Solução de Problemas



- 1) Verificar polaridade dos TCs ou medidor
- 2) Verificar conexão do TC no Smart Energy Manager
- 3) Verificar a posição do TC ou medidor

Obrigado!

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