

### VERTICAL STACK LIGHTING AND POWER DISTRIBUTION BOARDS

### INSTALLATION INSTRUCTIONS

**BS EN 61439-3**  
**IEC 61439-3**  
**BS EN 60898-1**  
**BSEN 60947-3**

### Catalogue Numbers (MLFBs):

	24 Way (STD)	8GP1544-2DA44	8GP1545-2DA44	8GP1546-2DA44	8GP1547-2DA44	-	-	-	
	24 Way (MID)	8GP1644-2DA44	8GP1645-2DA44	8GP1646-2DA44	8GP1647-2DA44	-	-	-	
	20 Way (STD)	8GP1538-2DA44	8GP1540-2DA44	8GP1541-2DA44	8GP1542-2DA44	8GP1543-2DA44	-	-	
	20 Way (MID)	8GP1638-2DA44	8GP1640-2DA44	8GP1641-2DA44	8GP1642-2DA44	8GP1643-2DA44	-	-	
Bottom Board	16 Way (STD)	8GP1532-2DA44	8GP1533-2DA44	8GP1534-2DA44	8GP1535-2DA44	8GP1536-2DA44	8GP1537-2DA44	-	
	16 Way (MID)	8GP1632-2DA44	8GP1633-2DA44	8GP1634-2DA44	8GP1635-2DA44	8GP1636-2DA44	8GP1637-2DA44	-	
	12 Way (STD)	8GP1524-2DA44	8GP1525-2DA44	8GP1526-2DA44	8GP1527-2DA44	8GP1528-2DA44	8GP1530-2DA44	8GP1531-2DA44	
	12 Way (MID)	8GP1624-2DA44	8GP1625-2DA44	8GP1626-2DA44	8GP1627-2DA44	8GP1628-2DA44	8GP1630-2DA44	8GP1631-2DA44	
	8 Way (STD)	8GP1516-2DA44	8GP1517-2DA44	8GP1518-2DA44	8GP1520-2DA44	8GP1521-2DA44	8GP1522-2DA44	8GP1523-2DA44	
	8 Way (MID)	8GP1616-2DA44	8GP1617-2DA44	8GP1618-2DA44	8GP1620-2DA44	8GP1621-2DA44	8GP1622-2DA44	8GP1623-2DA44	
	6 Way (STD)	8GP1508-2DA44	8GP1510-2DA44	8GP1511-2DA44	8GP1512-2DA44	8GP1513-2DA44	8GP1514-2DA44	8GP1515-2DA44	
	6 Way (MID)	8GP1608-2DA44	8GP1610-2DA44	8GP1611-2DA44	8GP1516-2DA44	8GP1516-2DA44	8GP1516-2DA44	8GP1516-2DA44	
	4 Way (STD)	8GP1501-2DA44	8GP1502-2DA44	8GP1503-2DA44	8GP1504-2DA44	8GP1505-2DA44	8GP1506-2DA44	8GP1507-2DA44	
	4 Way (MID)	8GP1601-2DA44	8GP1602-2DA44	8GP1603-2DA44	8GP1604-2DA44	8GP1605-2DA44	8GP1606-2DA44	8GP1607-2DA44	
		4 Way	6 Way	8 Way	12 Way	16 Way	20 Way	24 Way	
		Top Board							

### Technical Support

Email: [sales.gbi.industry@siemens.com](mailto:sales.gbi.industry@siemens.com)

### GENERAL WARNINGS



**DANGER: LIVE PARTS ENCLOSED.** Ensure the unit is installed by a qualified, competent person in accordance with all relevant legislation and regulations, including building regulations and wiring regulations BS7671. If in doubt, contact a qualified, competent person.



#### IMPORTANT INFORMATION

Follow the instructions below before working on or inside the equipment.



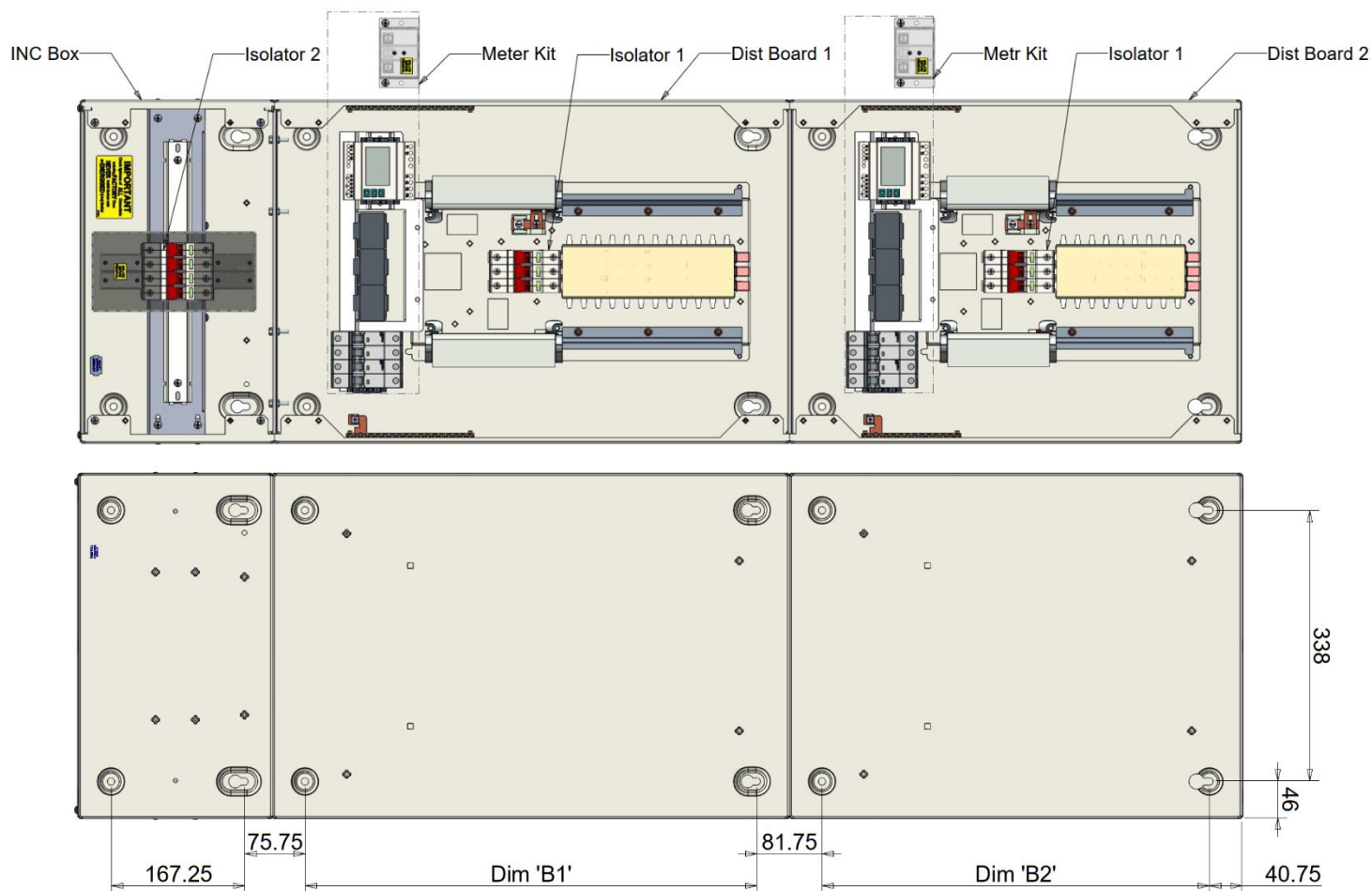
- Turn off all power supplies.
- Always use a calibrated volt-sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on the power to this equipment.
- To avoid ingress of swarf and similar material, always remove gland plates to allow cutting/slotting for cable entries.
- Do not use power screwdrivers on electrical connections.
- Parts of the installation in which the meter kit is to be installed may remain live even when isolated. When working on unit isolate MCB.
- Before fitting the front cover – Check tightness of all connections, including factory made connections.



**Failure to follow these instructions could result in serious injury or death.**



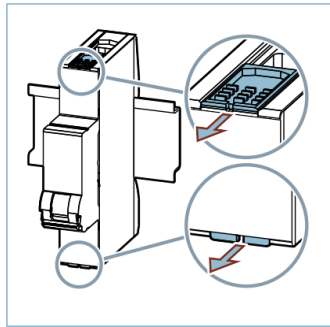
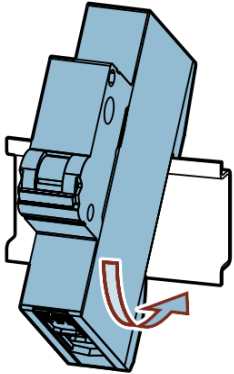
# Assembly (Layout)



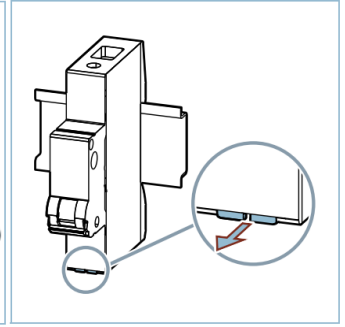
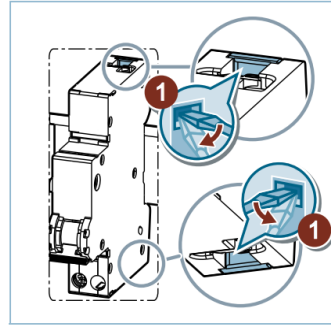
## Weight (Kg) – Dimensions (mm)

Description	Weight Kg	Dimensions			
		Height (mm)	Width (mm)	Depth (mm)	Fixing Centres (width x B*) (mm)
4 Way Distribution Board	9.6	486	430	155	338 x 404.25
6 Way Distribution Board	11.3	567	430	155	338 x 485.5
8 Way Distribution Board	12.7	648	430	155	338 x 566.25
12 Way Distribution Board	15	810	430	155	338 x 728.25
16 Way Distribution Board	17.7	891	430	155	338 x 809.25
20 Way Distribution Board	19.3	997	430	155	338 x 915.25
24 Way Distribution Board	22.4	1134	430	155	338 x 1052.25
Incoming Enclosure	3	243	430	155	338 x 167.25

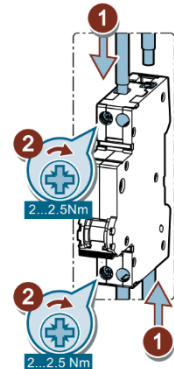
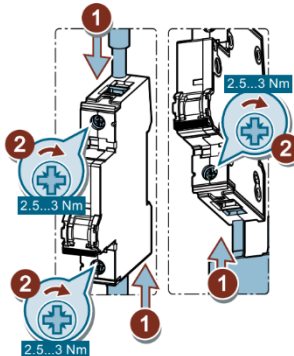
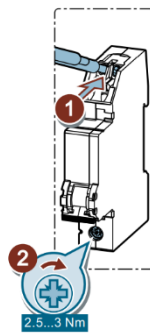
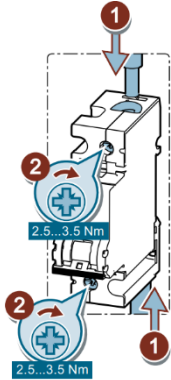
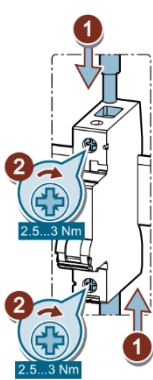
## MCB Assembly



## MCB Removal



## MCB connection



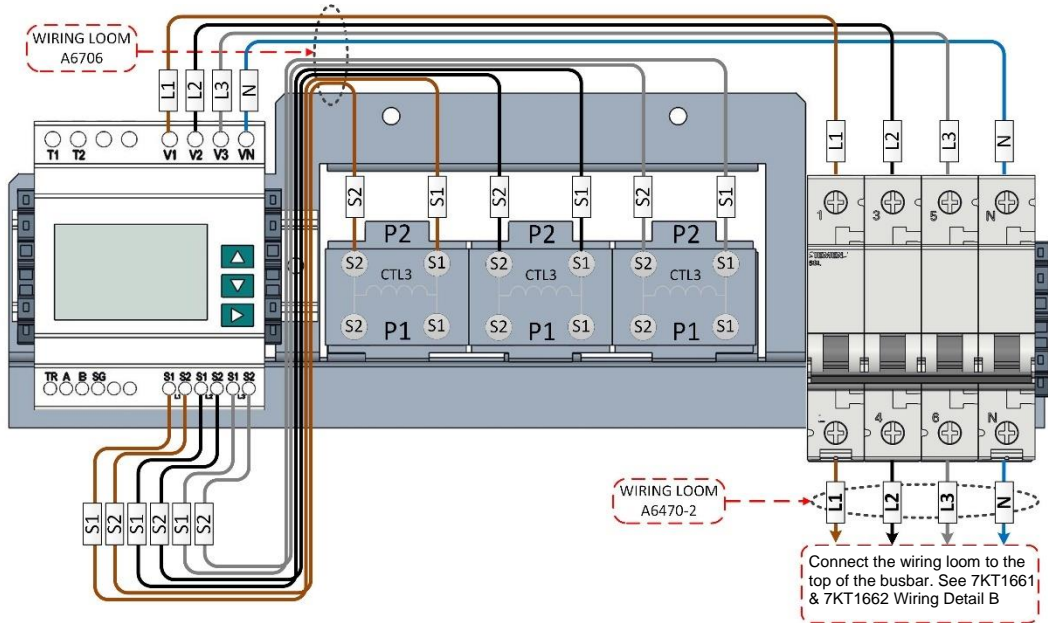
## Installation of 10 kA RCBOs and 6 kA RCBO + AFDD Combination Devices

- Ensure the supply is switched off.
- Loosen all device busbar terminal screws.
- Push the device onto the appropriate busbar outgoing way, ensuring that the DIN clip faces towards the busbar assembly.
- Fully tighten busbar connections to the recommended torque of the device.
- Connect the device Neutral lead to the appropriate numbered terminal on the neutral terminal bar.
- Ensure both live and neutral outgoing cables are terminated on the device's outgoing terminals.
- Connect the white functional earth lead to the appropriate terminal on the earth terminal bar.

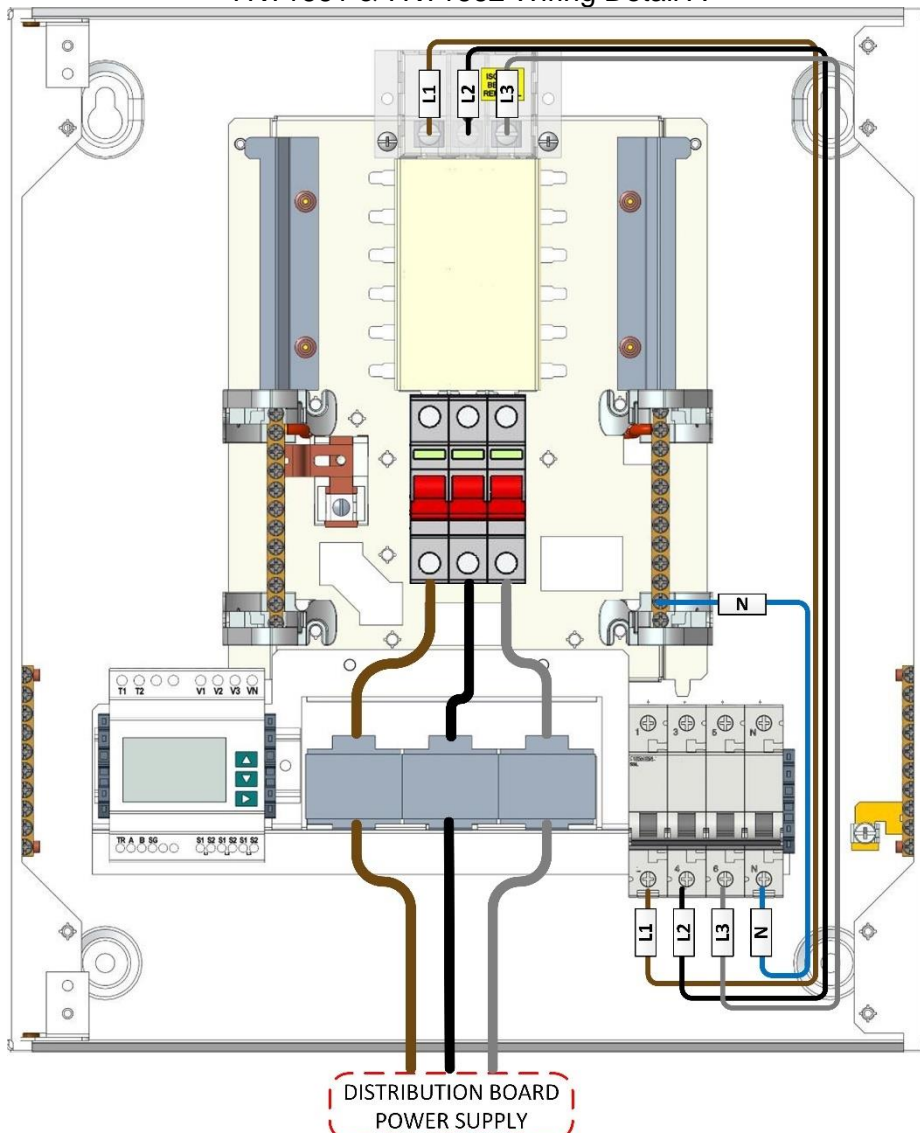
## **6 kA RCBO + AFDD Combination Devices can only be used for the final load circuit protection**

Main characteristics	
<b>Operating voltage</b>	
	240 V AC to 415 V AC
<b>Operating frequency</b>	
Maximum	50 Hz
<b>Power consumption</b>	
Maximum	≤ 125 A / 30 kW
<b>Degree of protection</b>	
	IP 3X
<b>Pollution degree</b>	
Environmental conditions to which the panel is intended	2 Minimum
Operating & storage temperature	
Operating temperature	-5 to +40 °C (Average of 24h max)
Storage temperature	-5 to +40 °C (Average of 24h max)
<b>Humidity</b>	
At maximum temperature (+40°C)	50%
Connections (Nm)	
Incoming device	2.3 Nm
Earth / Neutral bar	2.3 Nm
Busbar terminal cage	6 Nm
MCB	2.3 Nm
For more torque connection settings, refer to the device manual & meter technical data.	

# Meter Wiring for STD and MID Information

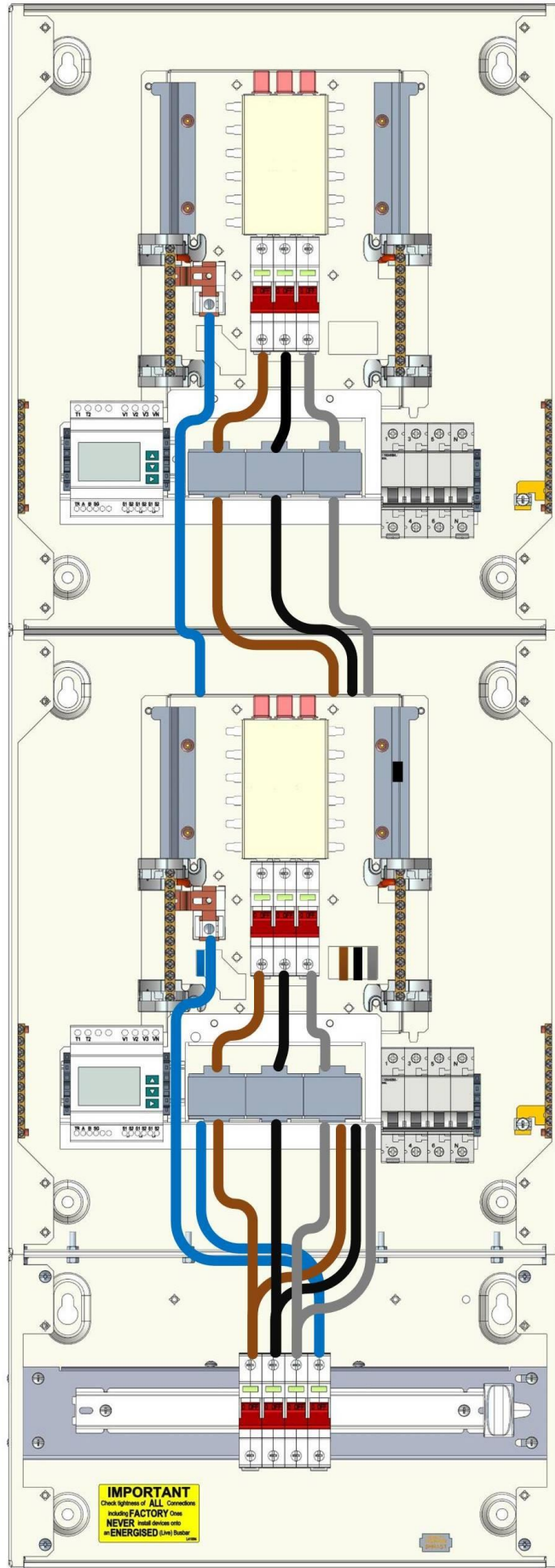


7KT1661 & 7KT1662 Wiring Detail A



7KT1661 & 7KT1662 Wiring Detail B

# Power Wiring Details for MID & STD Information



**SIEMENS**

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Waste electrical products should not be disposed of with household waste.  
Please recycle where waste disposal facilities exist.  
Check with your retailer, wholesaler or local authority for recycling advice.



## STD and MID Meter Technical Data Information

Input voltage	
Nominal voltage of 3-phase devices	230 V~/ 400 V~ L-L
Operating voltage range of 3-phase devices	187 ... 264 V~ L-N 323 ... 456 V~ L-L
Nominal frequency of MID devices	50 Hz
Nominal frequency of non-MID devices	50/60 Hz
Operating frequency range	45 ... 66 Hz
Operating frequency range for MID	49 ... 51 Hz
Input current	
Minimum current (I <sub>min</sub> )	At 5 A: 0.05 A
Max. current (I <sub>max</sub> ) of 5 A devices	6 A
Starting current (actual) of 5 A devices	10 mA
Burden per phase with 5 A devices	≤ 0.3 W
Environmental conditions	
Installation	For indoor use only
Storage temperature	-25 ... +70 °C
Relative humidity (IEC EN 60068-2-78)	< 80% non-condensing
Maximum degree of pollution	2
Overvoltage category	OVC III
Altitude	≤ 2000 m
Climatic sequence	Z/ABDM (IEC/EN 60068-2-61)
Shock resistance	10 g (IEC/EN 60068-2-27)
Vibration resistance	0.7 g (IEC/EN 60068-2-6)
Mechanical environment	Class M2
Electromagnetic environment	Class E2
Insulation voltage	
Rated insulation voltage L-N	250 V~
Rated impulse withstand voltage U <sub>imp</sub>	6 kV
AC withstand voltage	4 kV
<p>For all other information regarding the 7KT1661 and 7KT1162 meters, please refer to the user manual at:  <a href="https://mall.industry.siemens.com/mall/en/WW/Catalog/Product/7KT1661">https://mall.industry.siemens.com/mall/en/WW/Catalog/Product/7KT1661</a></p>	