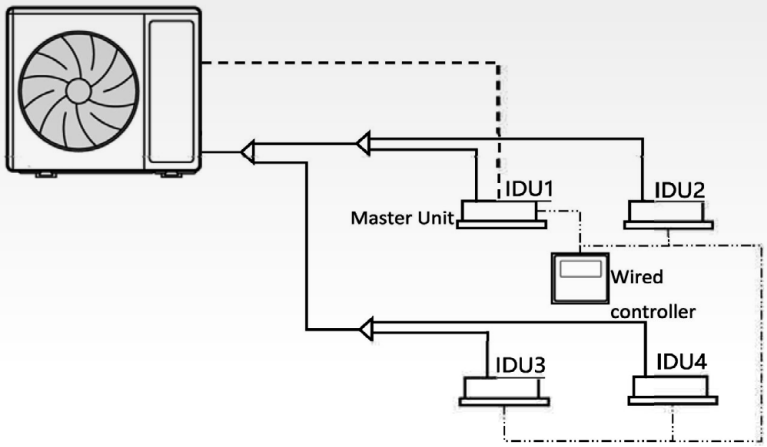
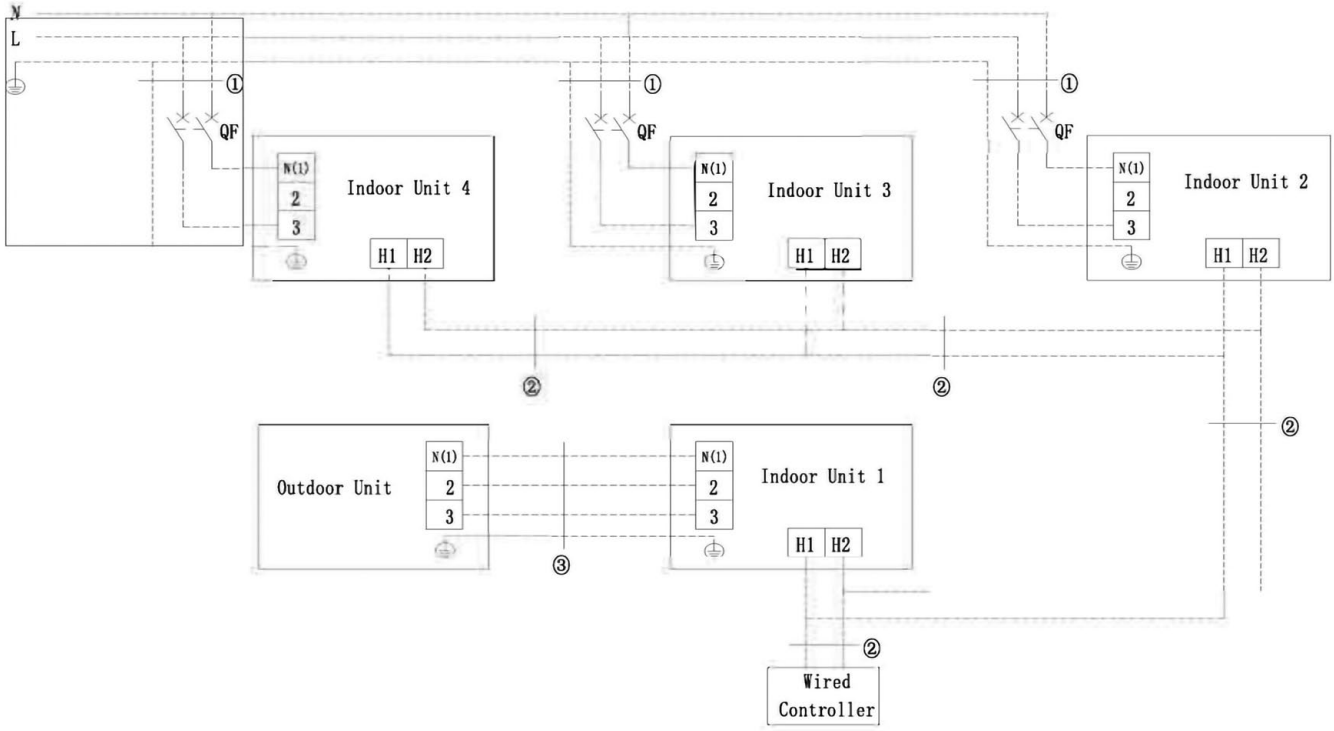
ELECTRICAL WIRING DIAGRAM



The UNI SPLIT 2 series allows applications with two, three or four indoor units without the need for additional accessories. The refrigerant circuit is divided by refnets (optional accessories). For the correct function of the system it is necessary to follow the combination table of the units.

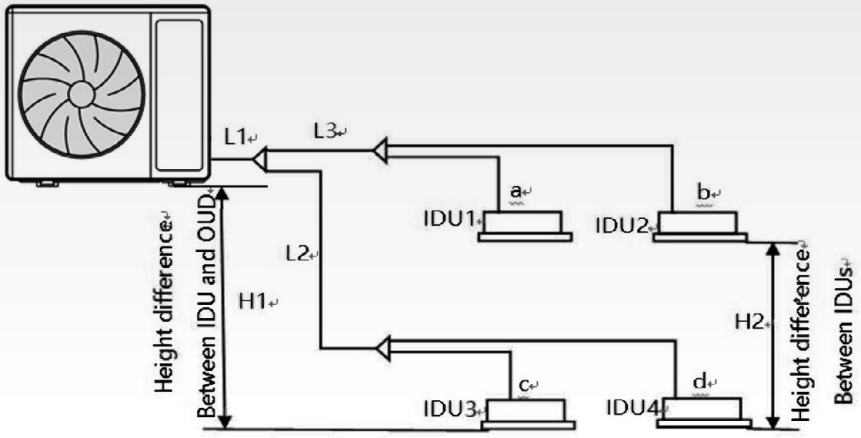


COMBINATIONS OF OUTDOOR AND INDOOR UNITS

Outdoor unit type (capacity)	Indoor units combination		
	Twin	Triple	Quatro
ASGE-24BI2 (7,1kW)	5,0 (kW)*2	—	—
ASGE-36BI2 (10,0kW)	5,0 (kW)*2	3,5 (kW)*3	—
ASGE-42BI2 (12,5kW)	7,1 (kW)*2	5,0 (kW)*3	3,5 (kW)*4
ASGE-48BI2 (14,0kW)	7,1 (kW)*2	5,0 (kW)*3	3,5 (kW)*4
ASGE-60BI2 (16,0kW)	8,5 (kW)*2	7,1 (kW)*3	5,0 (kW)*4

PIPE LENGTH CALCULATION

UNI SPLIT 2 SERIES



–	Refrigerant branches	Allowed value
Maximum pipe length	L1+L2+L3+a+b+c+d	Same as the outdoor unit
Minimum pipe length	L1+L2+L3+a+b+c+d	Same as the outdoor unit
Absolute height difference of connection pipe	H1	Same as the outdoor unit
Heigth difference between two IDUs	H2	<0.5m
Length difference of the connection pipe between either two IDU branch	(L2+d)-(L3+a)	<5m
Maximum pipe length from the first refrigerant distributor to the individual indoor units.	L3+a; L3+b; L2+c; L2+d	<20m

CALCULATION OF THE REQUIRED AMOUNT OF REFRIGERANT:

The total amount of refrigerant is defined by the following relationship:

$$Q_{TOT} = Q_{IDU} + (Q_{ODU} - Q_{PRE})$$

where:

Q_{IDU} total refrigerant amount for the liquid piping between the indoor units and the nearest Splitter, calculated according to the relation ($\Sigma\varnothing 1/4 * 16 + \Sigma\varnothing 3/8 * 20$)

Q_{ODU} total refrigerant amount for the liquid piping between the outdoor unit and all splitters for indoor units, multiplied by the appropriate g/m value (see the outdoor unit specification)

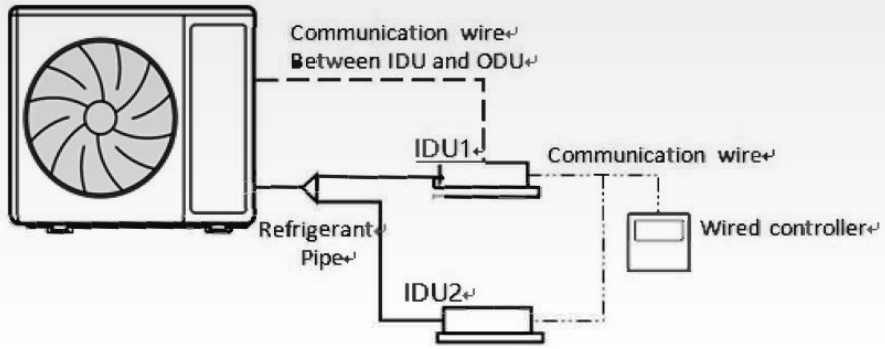
Q_{PRE} amount of refrigerant precharged from the factory, (see outdoor unit specification)

Capacity of indoor unit (kW)	Relevant pipe diameter (inches)	
	Liquid	Gas
3,5	Φ1/4 (16g/m)	Φ3/8
5,0	Φ1/4 (16g/m)	Φ1/2
7,1 - 16,0	Φ3/8 (20g/m)	Φ5/8

VARIANTS OF UNI-COMBI CONNECTION

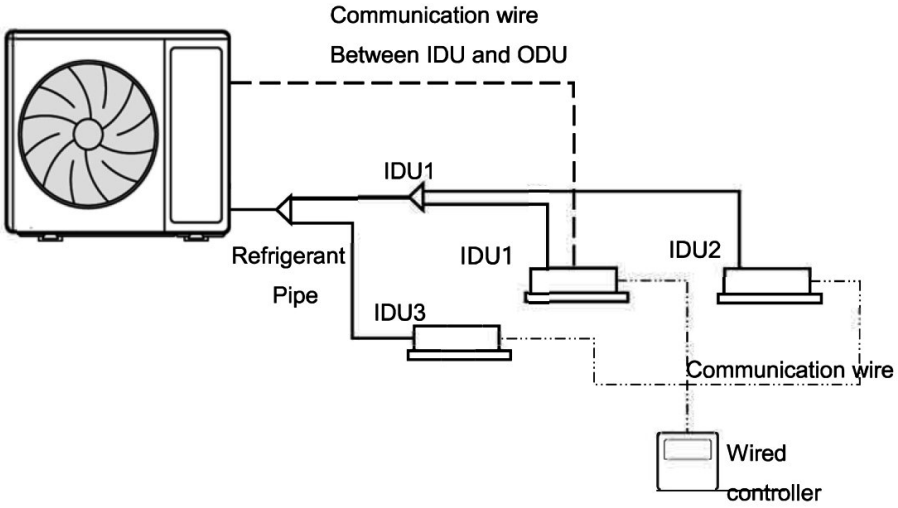
UNI SPLIT 2 SERIES

INSTALLATION DIAGRAM - TWIN



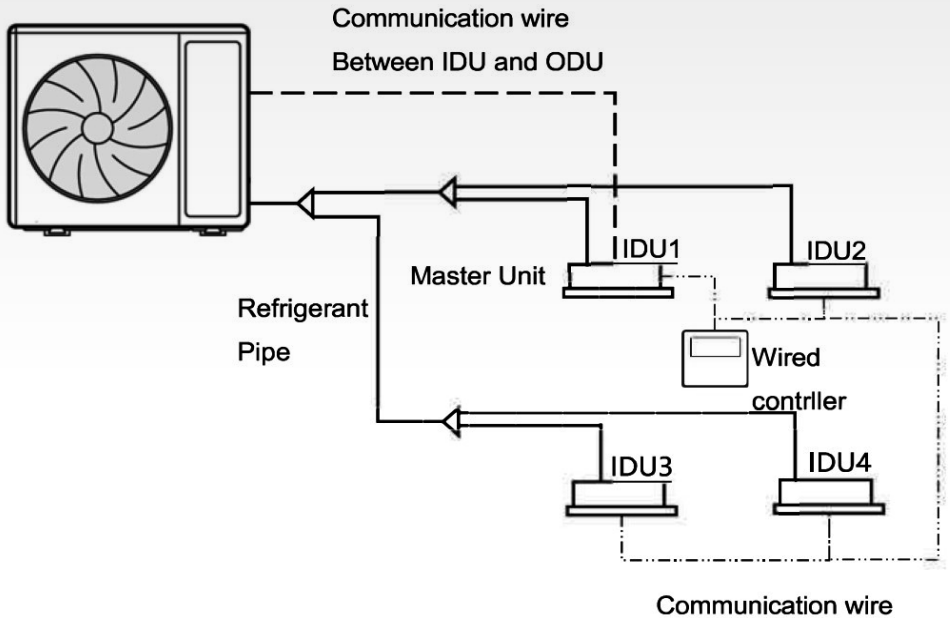
Refrigerant branches	Indoor unit capacity (kW)	Splitter type (amount)
ASGE-24BI2 (7,1kW)	5,0	SREF-01 ×1
ASGE-36BI2 (10,0kW)	5,0	SREF-01 ×1
ASGE-42BI2 (12,5kW)	7,1	SREF-01 ×1
ASGE-48BI2 (14,0kW)	7,1	SREF-01 ×1
ASGE-60BI2 (16,0kW)	8,5	SREF-01 ×1

INSTALLATION DIAGRAM - TRIPLE



Outdoor unit (capacity)	Indoor unit capacity (kW)	Splitter type (amount)
ASGE-36BI2 (10,0kW)	3,5	SREF-01 ×2
ASGE-42BI2 (12,5kW)	5,0	SREF-01 ×2
ASGE-48BI2 (14,0kW)	5,0	SREF-01 ×2
ASGE-60BI2 (16,0kW)	7,1	SREF-01 ×2

INSTALLATION DIAGRAM - QUATRO



Outdoor unit (capacity)	Indoor unit capacity (kW)	Splitter type (amount)
ASGE-42BI2 (12,5kW)	3,5	SREF-01 ×3
ASGE-48BI2 (14,0kW)	3,5	SREF-01 ×3
ASGE-60BI2 (16,0kW)	5,0	SREF-01 ×3