

## ISDL Series

### Split System Indoor Units

#### GENERAL

Two half capacity ISDL indoor units may be connected in tandem (pairs) to a single OSA outdoor unit.

This Tandem Kit is designed to facilitate this arrangement by pairing one ISDL unit c/w HAN-L6 Controller (Master unit) and one ISDL unit without controller (Slave unit).

This kit must be installed by a qualified electrician and in accordance with all national and local safety codes.

#### COMBINATIONS

- Two ISDL 29Q with one OSA 45
- Two ISDL 45Q with one OSA 73
- Two ISDL 45Q with one OSA 85
- Two ISDL 71Q with one OSA 126/127
- Two ISDL 84Q with one OSA 147/148/150
- Two ISDL 100Q with one OSA 180/181

#### COMPONENTS

1. Interconnecting cable 12.5 m
2. Wiring schematic label
3. Eight way terminal block
4. Terminal labels

Check that all items of the kitset are supplied. Items 3 and 4 are only required for units with electric heat.

## Tandem Kit

### Installation Instructions

#### INSTALLATION

Determine whether the units are supplied with or without electric heat installed.

##### *ISDL units without Electric Heat:*

1. Remove the electrical panels from the ISDL Indoor Units
2. Use the interconnecting cable supplied to complete the wiring as per the Wiring Loom table below and as per wiring diagram overleaf.
3. Replace the existing wiring diagram on the ISDL Master Unit with the self-adhesive label supplied.
4. Replace electrical box covers.

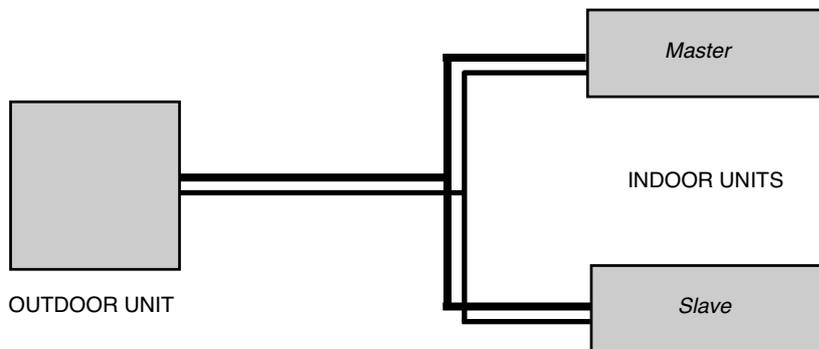
##### *ISDL units with Electric Heat:*

1. Remove the electrical panels from the ISDL Indoor Units.
2. Replace the 8 way terminal block in the ISDL Master unit with the supplied 11 way terminal block.
3. Replace the terminal labels in each unit with the appropriate self-adhesive terminal labels supplied (as per wiring diagram overleaf).

Note: The power supply to electric heat (if fitted) is now from terminal '20' instead of terminal '4'.

4. Use the interconnecting cable supplied to complete the wiring as per the Wiring Loom table below and as per wiring diagram overleaf.
5. Upgrade the external fuse of the outdoor unit to take account of the electric heat of the Slave unit. Check the power supply cable to the outdoor unit is sufficiently sized to take the extra electric heat load.
6. Install a two or three pole isolator between the ISDL Master unit and the Outdoor Unit.
7. Replace the existing wiring diagram on the ISDL Master Unit with the self-adhesive label supplied.
8. Replace electrical box covers.

### Tandem Refrigeration Piping



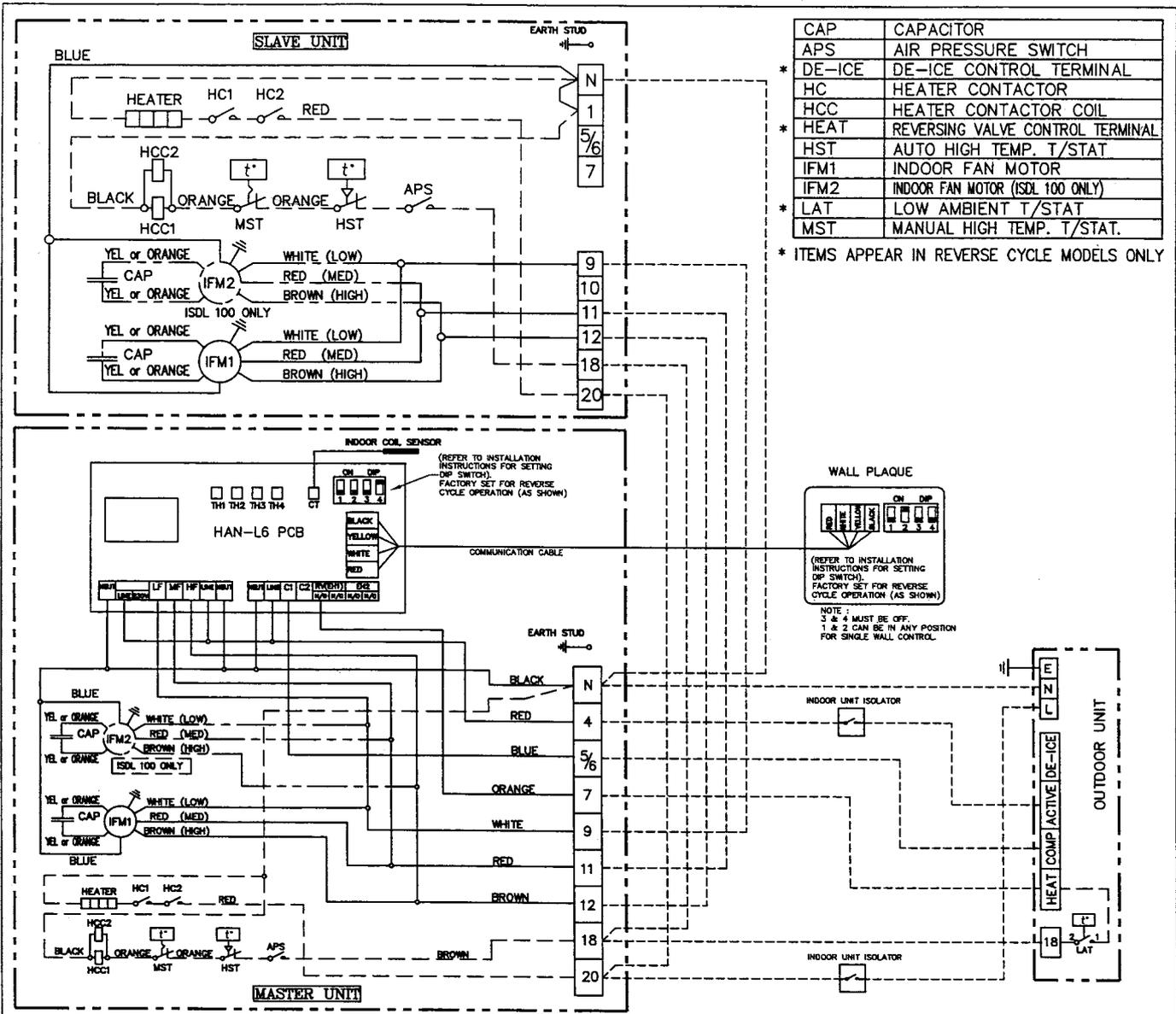
### Wiring Loom

Item	Length (mm)	Colour	From	To
1	12500	Green	Earth stud (Slave)	Earth stud (Master)
2	12500	Black	terminal N (Slave)	terminal N (Master)
3	12500	White	terminal 9 (Slave)	terminal 9 (Master)
4	12500	Blue	terminal 11 (Slave)	terminal 11 (Master)
5	12500	Brown	terminal 12 (Slave)	terminal 12 (Master)

#### REFRIGERATION PIPING

When connecting two indoor units in tandem to a single circuit outdoor unit ensure the following:

1. Maximum line length specified for the outdoor unit must include both tandem legs.
2. Tandem legs must be as close as possible to equal, after leaving the common leg.
3. Ensure each 'T' joint connection is the same size as the common leg's pipe size, downsizing if necessary from there to each indoor unit.



CAP	CAPACITOR
APS	AIR PRESSURE SWITCH
DE-ICE	DE-ICE CONTROL TERMINAL
HC	HEATER CONTACTOR
HCC	HEATER CONTACTOR COIL
HEAT	REVERSING VALVE CONTROL TERMINAL
HST	AUTO HIGH TEMP. T/STAT
IFM1	INDOOR FAN MOTOR
IFM2	INDOOR FAN MOTOR (ISDL 100 ONLY)
LAT	LOW AMBIENT T/STAT
MST	MANUAL HIGH TEMP. T/STAT.

\* ITEMS APPEAR IN REVERSE CYCLE MODELS ONLY

NOTE:  
3 & 4 MUST BE OFF.  
1 & 2 CAN BE IN ANY POSITION  
FOR SINGLE WALL CONTROL.

OPTIONAL ELECTRIC HEAT

MODEL	ISDL	ISDL				
		29	45	71	84	100
INDOOR FAN MOTOR RUNNING AMPS	HIGH	0.40	0.70	1.15	1.20	1.70
	MED	0.35	0.48	0.95	1.05	1.45
	LOW	0.30	0.40	0.85	0.90	1.30
ELECTRIC HEAT KW		1.0	1.5	2.0	2.0	3.0

CLIENT WIRING  
Interconnections between units by client. Double insulated multi-core cable.

NOTE: - CHECK WIRING BEFORE SWITCHING ON, INCORRECT CONNECTION WILL DAMAGE MOTORS

Title ISDL 29-100 Q (HAN-L6)  
TANDEM ARRANGEMENT



Drawn D.A.B	Date 20-12-04	Drawing No. 325-004-010	Revision
	Aprvd 05		

**Note**  
The manufacturer reserves the right to change specifications at any time without notice or obligation. Certified dimension available on request.

This pamphlet replaces the previous issue no. 2294 dated 07/03.  
Wiring rev. B, HAN-L6.