

# Altech UL489 Busbar Systems



UL489 recognized  
E305318

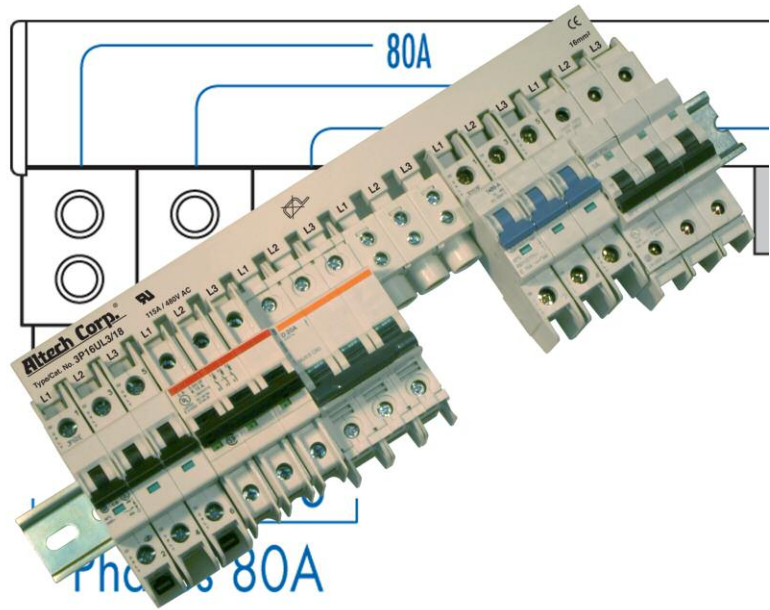


## UL489 Listed Busbars

The Altech Busbar System is an innovative way to jumper up to 57 poles of Miniature Circuit Breakers (MCB).

The advantages of this busbar system are:

- 30% Installation time savings
- Panel space savings
- Reduced maintenance
- High electrical ratings



**Universal UL489 Busbar  
fits most UL489 Miniature Circuit  
Breakers in the market!**

*Please contact Altech for details and further information.*

## UL489 Busbar System

- Every pin configuration is possible by combination of existing 6, 12 and 18 pin busbars.
- Power Feeding:  
Power Feed Lug (115A), Direct Power Feed (115A)
- UL listed for Altech's L-Series of Miniature Circuit Breakers
- UL listed for use with most popular UL489 Miniature Circuit Breakers in the market.

| Technical Specifications         | Busbars UL489                                       |
|----------------------------------|-----------------------------------------------------|
| Material of Busbar               | Copper                                              |
| Material of Insulation (Housing) | Polyamid                                            |
| Electrical Ratings               | 115A/480VAC                                         |
| Short Circuit Withstand Rating   | 10kA                                                |
| Applying Standards               | UL489, VDE0660 Part 100,<br>IEC60749, DIN EN60947-1 |

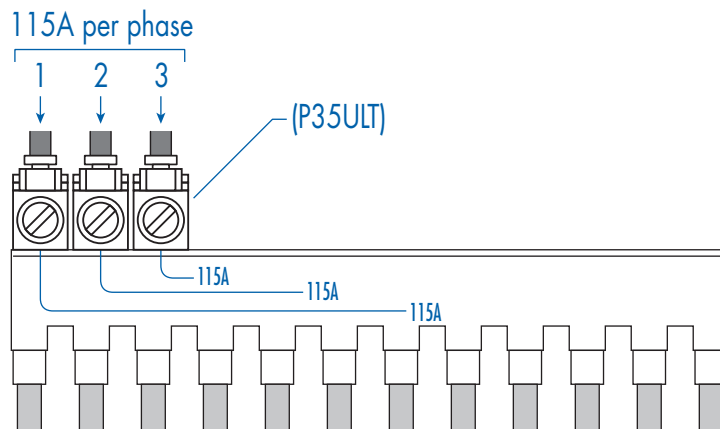
# Altech UL489 Busbar System

## Power Feed Methods

### End Feed Method

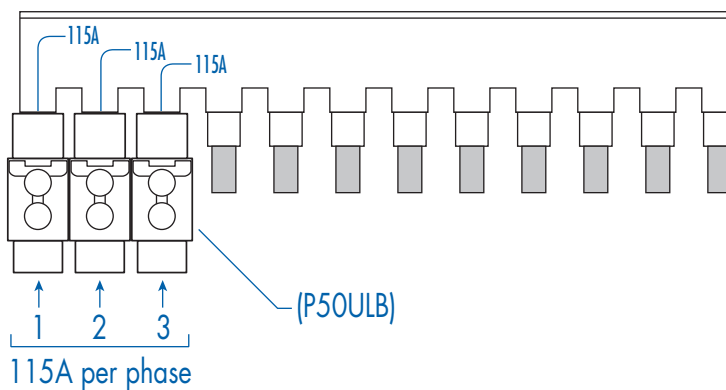
#### P35ULT\*

With the **P35ULT** Power Feed Lug as a Start/End Feeding Device a maximum input current of **115A per Phase** can be achieved.



#### P50ULB\*

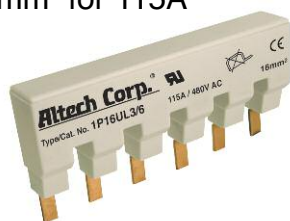
With the **P50ULB** Modular Direct Power Feed as a Start/End Feeding Device a maximum input current of **115A per Phase** can be achieved.



\* For complete specifications and description of Feeding Devices see page 19.

# 1 PHASE BUSBAR

16mm<sup>2</sup> for 115A



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E305318



Type/  
Cat. No.

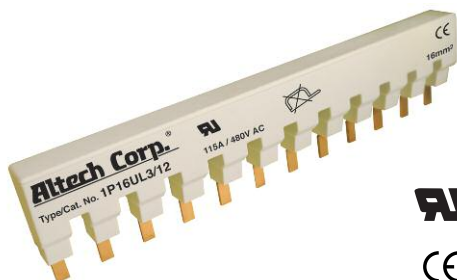
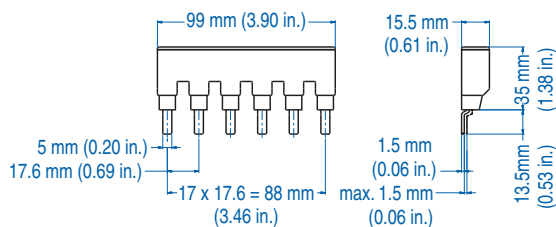
No. of  
Pins

Length  
[mm]

1P16UL3/6

6

99



UL489 recognized  
E305318



Type/  
Cat. No.

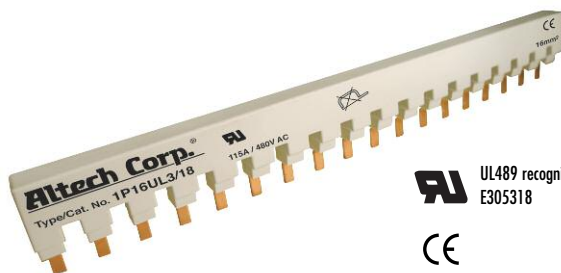
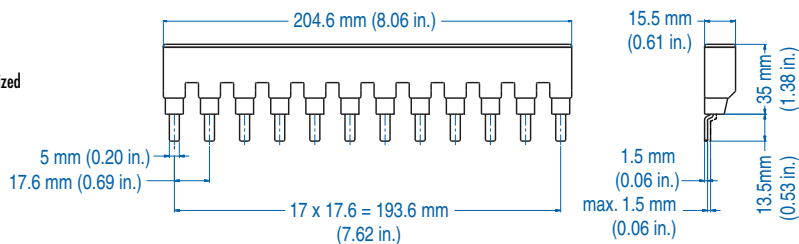
No. of  
Pins

Length  
[mm]

1P16UL3/12

12

204.6



UL489 recognized  
E305318



Type/  
Cat. No.

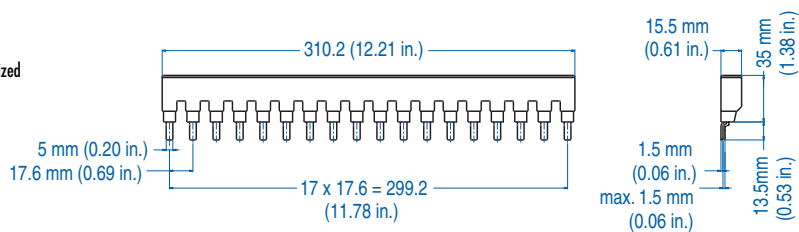
No. of  
Pins

Length  
[mm]

1P16UL3/18

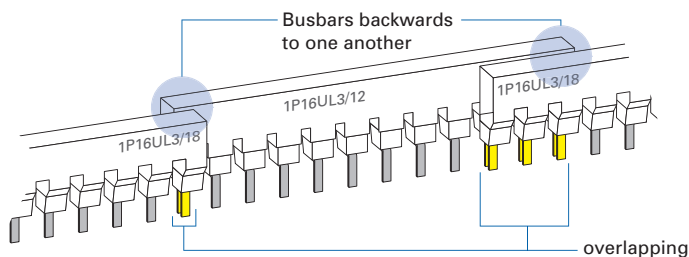
18

310.2



## Example for different No. of Pins

eg. 44 pins use 1x 1P16UL3/12 + 2x 1P16UL3/18



- No. of overlapping pins of 2 busbars must be a multiplier of the No. of phases
- Overlapping busbars are backwards to each other

## ACCESSORIES



Type/Cat. No:

P35ULT

Description:

Power Feed Lug



P50ULB

Modular Direct Power Feed

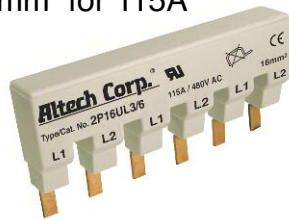


BRUL (3 per strip)

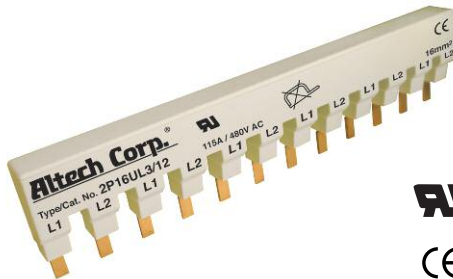
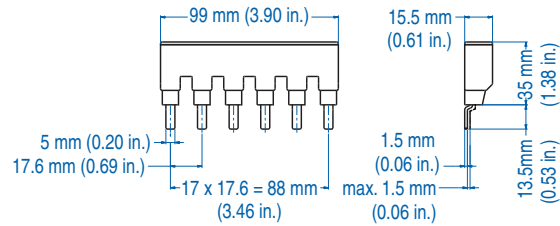
Insulation Cap

## 2 PHASE BUSBAR

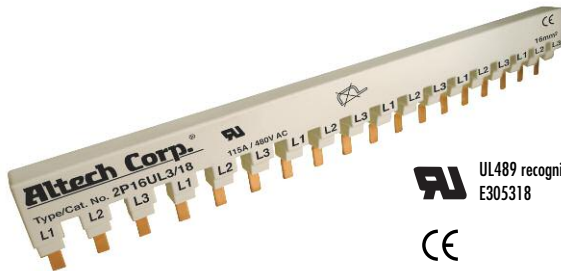
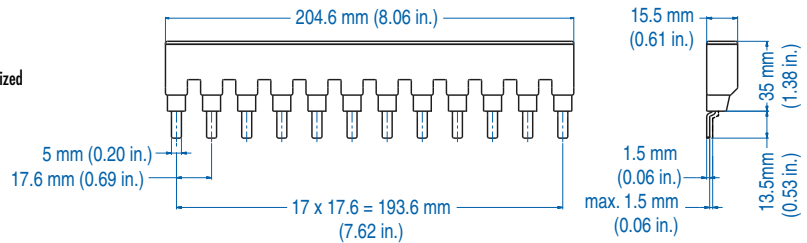
16mm<sup>2</sup> for 115A



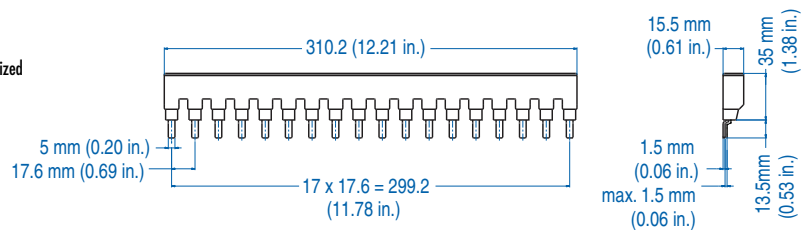
| Type/<br>Cat. No. | No. of<br>Pins | Length<br>[mm] |
|-------------------|----------------|----------------|
| 2P16UL3/6         | 6              | 99             |



| Type/<br>Cat. No. | No. of<br>Pins | Length<br>[mm] |
|-------------------|----------------|----------------|
| 2P16UL3/12        | 12             | 204.6          |

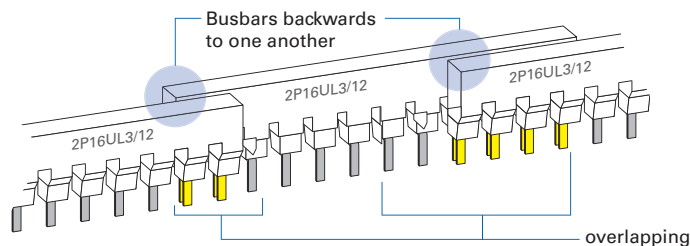


| Type/<br>Cat. No. | No. of<br>Pins | Length<br>[mm] |
|-------------------|----------------|----------------|
| 2P16UL3/18        | 18             | 310.2          |



### Example for different No. of Pins

eg. 30 pins use 3x 2P16UL3/12



- No. of overlapping pins of 2 busbars must be multiplier of the No. of phases
- Overlapping busbars are backwards to each other

## ACCESSORIES



Type/Cat. No: **P35ULT**  
Description: Power Feed Lug



Type/Cat. No: **P50ULB**  
Description: Modular Direct Power Feed



Type/Cat. No: **BRUL (3 per strip)**  
Description: Insulation Cap

# 3 PHASE BUSBAR

16mm<sup>2</sup> for 115A



UL489 listed  
E305318



Type/  
Cat. No.

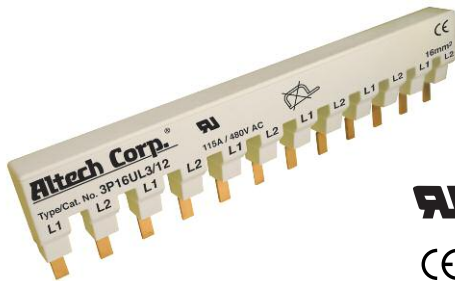
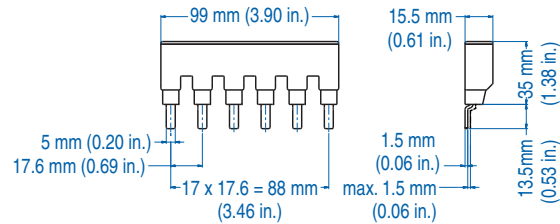
No. of  
Pins

Length  
[mm]

3P16UL3/6

6

99



UL489 listed  
E305318



Type/  
Cat. No.

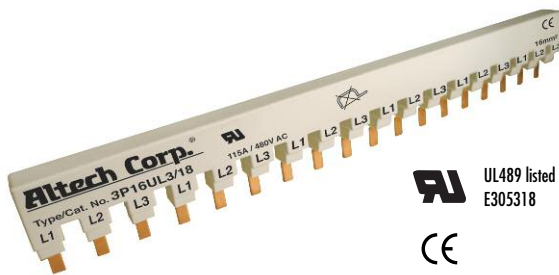
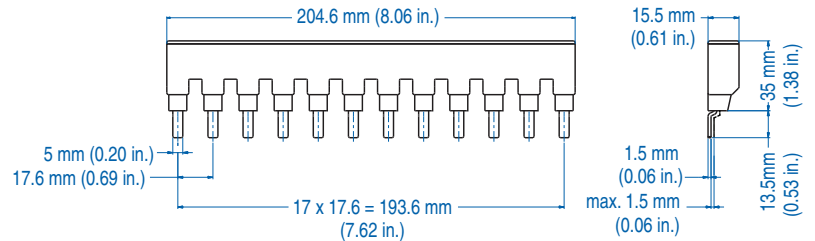
No. of  
Pins

Length  
[mm]

3P16UL3/12

12

204.6



UL489 listed  
E305318



Type/  
Cat. No.

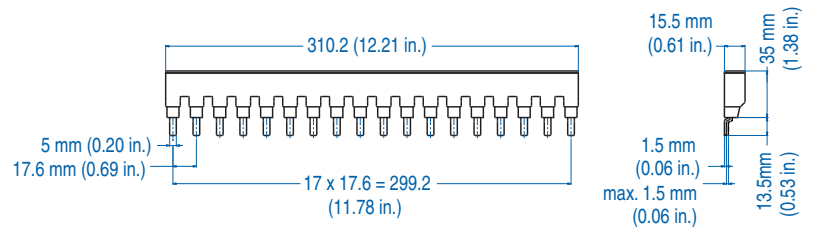
No. of  
Pins

Length  
[mm]

3P16UL3/18

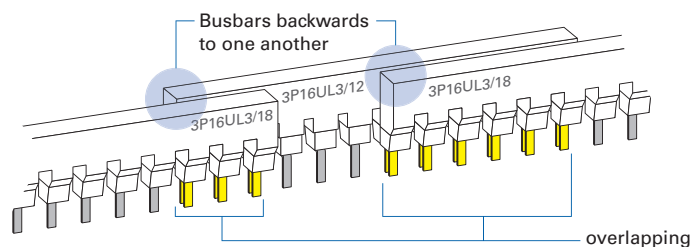
18

310.2



## Example for different No. of Pins

eg. 39 pins use 1x 3P16UL3/12 + 2x 3P16UL3/18



- No. of overlapping pins of 2 busbars must be multiplier of the No. of phases
- Overlapping busbars are backwards to each other

## ACCESSORIES



Type/Cat. No:

P35ULT

Description:

Power Feed Lug



P50ULB

Modular Direct Power Feed



BRUL (3 per strip)

Insulation Cap

## Power Feed Devices

Easy connection of power supply wires to the busbar/MCB. Power Feed Devices ensure permanent connection.

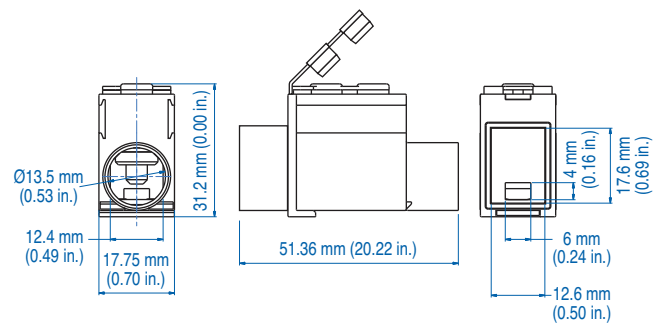
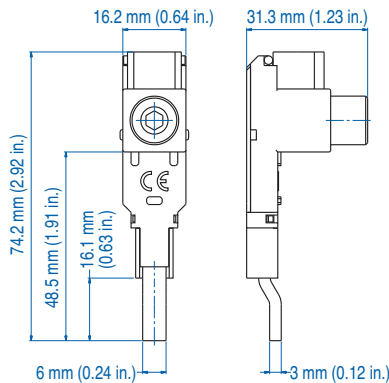
### Power Feed Lug



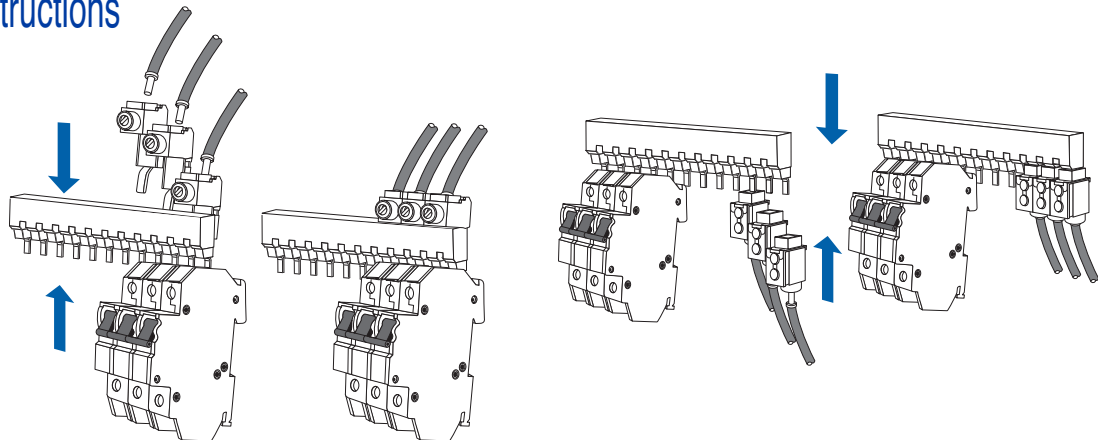
### Modular Direct Power Feed



| Type/Cat. No.               | P35ULT                        | P50ULB                                                  |
|-----------------------------|-------------------------------|---------------------------------------------------------|
| Electrical Ratings          | 115A/480V AC                  | 115A/480V AC                                            |
| Conductors                  | 75 C°                         | 75 C°                                                   |
| Terminal Site Acceptability | 14-2AWG(1.53mm <sup>2</sup> ) | 14-1AWG(1.5-50mm <sup>2</sup> )                         |
| Required Torque             | 4Nm (35.4 lb. in.)            | 3.5Nm/31 lb. in. (14-6AWG)<br>4Nm/35.4 lb. in. (4-1AWG) |
| Material of Lug             | Brass                         | Brass                                                   |
| Insulation Material         | Polyamid                      | Polyamid                                                |
| For use with                | UL489 1-3 phase Busbar        | UL489 1-3 phase Busbar                                  |



## Assembly Instructions



## Miscellaneous Accessories

### Insulation Caps



Type/Cat. No:

BRUL (3 per strip)

Description:

Insulation Cap



## Configuration and Assembly of UL489 Busbars

UL489 Busbars are available in 3 different Pin Configurations per Phase, (6, 12 and 18 Pins).

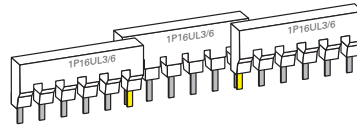
The UL489 busbar cannot be cut, since the creepage and clearance distance requirements from UL are too stringent. Therefore, to obtain the desired No. of Pins, Busbar-Pins can be overlapped as explained below:

- 1) Busbars are overlapped backwards to each other. Both Pins of each Busbar fit together in the terminals of the Minature Circuit Breaker.
- 2) The Number of overlapping Pins of 2 Busbar must be a multiplier of the Number of Phases to keep existing Phase sequence. (Can be overlapped by more than the number of phases).
- 3) Any available combination of the 3 different Pin configurations is possible.
- 4) In most cases there is more than 1 combination possible.
- 5) For more possible configurations see Busbar Selection Table on page 21.

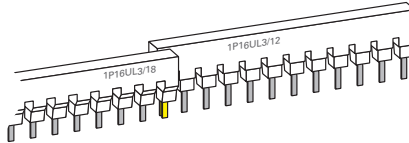
### Configuration Examples\*

1 Phase

16 Pins: 3 x 1P16UL3/6

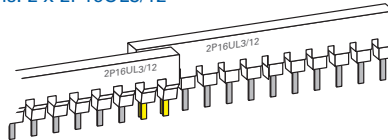


29 Pins: 1 x 1P16UL3/12 + 1 x 1P16UL3/18

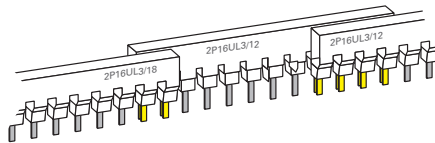


2 Phase

22 Pins: 2 x 2P16UL3/12

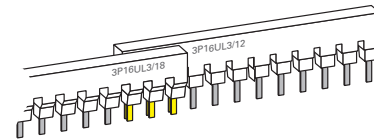


36 Pins: 2 x 2P16UL3/12 + 1 x 2P16UL3/18

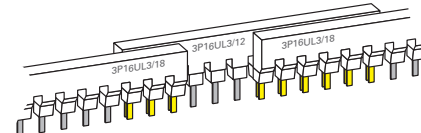


3 Phase

27 Pins: 1 x 3P16UL3/12 + 1 x 3P16UL3/18



39 Pins: 1 x 3P16UL3/12 + 2 x 3P16UL3/18



\*For Questions, other configurations and detailed information please contact Altech Corp.

# Busbar Selection Table

| No. of Pins           | Necessary Busbars                                                                                                                                               | No. of Pins | Necessary Busbars                                                                                               | No. of Pins           | Necessary Busbars                                                                                                               | No. of Pins                                              | Necessary Busbars                                                                                                               |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Phase System</b> |                                                                                                                                                                 |             |                                                                                                                 |                       |                                                                                                                                 | <b>3 Phase System</b>                                    |                                                                                                                                 |
| 6                     | 1x 1P16UL3/6                                                                                                                                                    | 27          | 2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18                                                                  | 43                    | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                                  | 38                                                       | 1x 2P16UL3/6 + 2x 2P16UL3/18<br>3x 2P16UL3/18                                                                                   |
| 7                     | 2x 1P16UL3/6                                                                                                                                                    |             | 2x 1P16UL3/6 + 1x 1P16UL3/18                                                                                    | 44                    | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                                  |                                                          | 2x 2P16UL3/12 + 1x 2P16UL3/18<br>1x 2P16UL3/12 + 2x 2P16UL3/18                                                                  |
| 8                     | 2x 1P16UL3/6                                                                                                                                                    |             | 3x 1P16UL3/12                                                                                                   |                       |                                                                                                                                 |                                                          |                                                                                                                                 |
| 9                     | 2x 1P16UL3/6                                                                                                                                                    | 28          | 2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18                                                                  | 45                    | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                                  | 40                                                       | 3x 2P16UL3/18<br>1x 2P16UL3/12 + 2x 2P16UL3/18                                                                                  |
| 10                    | 2x 1P16UL3/6                                                                                                                                                    |             | 2x 1P16UL3/6 + 1x 1P16UL3/18                                                                                    | 46                    | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                                  | 42                                                       | 3x 2P16UL3/18<br>1x 2P16UL3/12 + 2x 2P16UL3/18                                                                                  |
| 12                    | 1x 1P16UL3/12<br>3x 1P16UL3/6                                                                                                                                   | 29          | 2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18                                                                  | 47                    | 3x 1P16UL3/18                                                                                                                   | 44                                                       | 3x 2P16UL3/18<br>1x 2P16UL3/12 + 2x 2P16UL3/18                                                                                  |
| 13                    | 2x 1P16UL3/12<br>3x 1P16UL3/6<br>1x 1P16UL3/6 + 1x 1P16UL3/12                                                                                                   | 30          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 48                    | 3x 1P16UL3/18                                                                                                                   | 46                                                       | 3x 2P16UL3/18                                                                                                                   |
| 14                    | 2x 1P16UL3/12<br>3x 1P16UL3/6<br>1x 1P16UL3/6 + 1x 1P16UL3/12                                                                                                   |             | 2x 1P16UL3/12 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18                                                  | 49                    | 3x 1P16UL3/18                                                                                                                   | 48                                                       | 3x 2P16UL3/18                                                                                                                   |
| 15                    | 2x 1P16UL3/12<br>3x 1P16UL3/6<br>1x 1P16UL3/6 + 1x 1P16UL3/12                                                                                                   | 31          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 50                    | 3x 1P16UL3/18                                                                                                                   | 50                                                       | 3x 2P16UL3/18                                                                                                                   |
| 16                    | 2x 1P16UL3/12<br>3x 1P16UL3/6<br>1x 1P16UL3/6 + 1x 1P16UL3/12                                                                                                   |             | 2x 1P16UL3/12 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18                                                  | <b>2 Phase System</b> |                                                                                                                                 |                                                          |                                                                                                                                 |
| 17                    | 2x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12                                                                                                                   | 32          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 6                     | 1x 2P16UL3/6                                                                                                                    | 9                                                        | 2x 3P16UL3/6                                                                                                                    |
| 18                    | 1x 1P16UL3/18<br>2x 1P16UL3/12<br>2x 1P16UL3/6 + 1x 1P16UL3/12<br>1x 1P16UL3/6 + 2x 1P16UL3/12                                                                  | 33          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 8                     | 2x 2P16UL3/6                                                                                                                    | 12                                                       | 1x 3P16UL3/12<br>3x 3P16UL3/6                                                                                                   |
| 19                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/12<br>1x 1P16UL3/6 + 2x 1P16UL3/12                                                                  |             | 2x 1P16UL3/12 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18                                                  | 10                    | 2x 2P16UL3/6                                                                                                                    | 15                                                       | 1x 3P16UL3/6 + 1x 3P16UL3/12<br>2x 3P16UL3/12                                                                                   |
| 20                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>1x 1P16UL3/6 + 2x 1P16UL3/12<br>2x 1P16UL3/6 + 1x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18 | 34          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 12                    | 3x 2P16UL3/6<br>1x 2P16UL3/12                                                                                                   | 18                                                       | 1x 3P16UL3/18<br>1x 3P16UL3/12 + 2x 3P16UL3/6<br>2x 3P16UL3/12                                                                  |
| 21                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/12<br>1x 1P16UL3/6 + 2x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18 | 35          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 14                    | 3x 2P16UL3/6<br>2x 2P16UL3/12<br>1x 2P16UL3/6 + 1x 2P16UL3/12                                                                   | 21                                                       | 2x 3P16UL3/12<br>1x 3P16UL3/6 + 1x 3P16UL3/18<br>1x 3P16UL3/12 + 1x 3P16UL3/18<br>2x 3P16UL3/18                                 |
| 22                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/12<br>1x 1P16UL3/6 + 2x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18 | 36          | 2x 1P16UL3/18<br>3x 1P16UL3/12<br>1x 1P16UL3/6 + 1x 1P16UL3/12<br>+ 1x 1P16UL3/18                               | 16                    | 2x 2P16UL3/12<br>1x 2P16UL3/6 + 1x 2P16UL3/12                                                                                   | 24                                                       | 1x 3P16UL3/12 + 1x 3P16UL3/18<br>2x 3P16UL3/6 + 1x 3P16UL3/18<br>1x 3P16UL3/6 + 2x 3P16UL3/12<br>3x 3P16UL3/12<br>2x 3P16UL3/18 |
| 23                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>1x 1P16UL3/6 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18                                                                 | 37          | 1x 1P16UL3/6 + 2x 1P16UL3/18<br>2x 1P16UL3/12 + 1x 1P16UL3/18<br>3x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18 | 18                    | 1x 2P16UL3/18<br>2x 2P16UL3/12<br>2x 2P16UL3/6 + 1x 2P16UL3/12                                                                  | 27                                                       | 1x 3P16UL3/12 + 1x 3P16UL3/18<br>2x 3P16UL3/18<br>3x 3P16UL3/12                                                                 |
| 24                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/18<br>3x 1P16UL3/12                                                | 38          | 1x 1P16UL3/6 + 2x 1P16UL3/18<br>2x 1P16UL3/12 + 1x 1P16UL3/18<br>3x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18 | 20                    | 2x 2P16UL3/6 + 1x 2P16UL3/12<br>1x 2P16UL3/6 + 1x 2P16UL3/18<br>2x 2P16UL3/12<br>2x 2P16UL3/18<br>1x 2P16UL3/12 + 1x 2P16UL3/18 | 30                                                       | 2x 3P16UL3/18<br>2x 3P16UL3/6 + 1x 3P16UL3/18<br>3x 3P16UL3/12<br>1x 3P16UL3/6 + 1x 3P16UL3/12<br>+ 1x 3P16UL3/18               |
| 25                    | 2x 1P16UL3/12<br>2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/18<br>3x 1P16UL3/12                                                | 39          | 1x 1P16UL3/6 + 2x 1P16UL3/18<br>2x 1P16UL3/12 + 1x 1P16UL3/18<br>3x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18 | 22                    | 2x 2P16UL3/12<br>2x 2P16UL3/18<br>1x 2P16UL3/6 + 1x 2P16UL3/18<br>1x 2P16UL3/12 + 1x 2P16UL3/18                                 | 33                                                       | 2x 3P16UL3/18<br>2x 3P16UL3/12 + 1x 3P16UL3/18                                                                                  |
| 26                    | 2x 1P16UL3/18<br>1x 1P16UL3/12 + 1x 1P16UL3/18<br>2x 1P16UL3/6 + 1x 1P16UL3/18<br>3x 1P16UL3/12                                                                 | 40          | 1x 1P16UL3/6 + 2x 1P16UL3/18<br>2x 1P16UL3/12 + 1x 1P16UL3/18<br>1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18 | 24                    | 2x 2P16UL3/6 + 1x 2P16UL3/18<br>1x 2P16UL3/6 + 2x 2P16UL3/12<br>3x 2P16UL3/12<br>2x 2P16UL3/18<br>1x 2P16UL3/12 + 1x 2P16UL3/18 | 36                                                       | 1x 3P16UL3/6 + 2x 3P16UL3/18<br>2x 3P16UL3/12 + 1x 3P16UL3/18<br>1x 3P16UL3/12 + 2x 3P16UL3/18<br>3x 3P16UL3/18                 |
|                       |                                                                                                                                                                 | 41          | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                  | 26                    | 2x 2P16UL3/6 + 1x 2P16UL3/18<br>1x 2P16UL3/6 + 2x 2P16UL3/12<br>3x 2P16UL3/12<br>2x 2P16UL3/18<br>1x 2P16UL3/12 + 1x 2P16UL3/18 | 39                                                       | 1x 3P16UL3/12 + 2x 3P16UL3/18<br>3x 3P16UL3/18                                                                                  |
|                       |                                                                                                                                                                 | 42          | 1x 1P16UL3/12 + 2x 1P16UL3/18<br>3x 1P16UL3/18                                                                  | 28                    | 3x 2P16UL3/12<br>2x 2P16UL3/12 + 1x 2P16UL3/18<br>2x 2P16UL3/18                                                                 | 42                                                       | 1x 3P16UL3/12 + 2x 3P16UL3/18<br>3x 3P16UL3/18                                                                                  |
|                       |                                                                                                                                                                 |             |                                                                                                                 | 30                    | 1x 2P16UL3/6 + 1x 2P16UL3/12<br>+ 1x 2P16UL3/18<br>3x 2P16UL3/12<br>2x 2P16UL3/12 + 1x 2P16UL3/18<br>2x 2P16UL3/18              | 45                                                       | 3x 3P16UL3/18                                                                                                                   |
|                       |                                                                                                                                                                 |             |                                                                                                                 | 32                    | 1x 2P16UL3/6 + 1x 2P16UL3/12<br>+ 1x 2P16UL3/18<br>3x 2P16UL3/12<br>2x 2P16UL3/12 + 1x 2P16UL3/18<br>2x 2P16UL3/18              | 48                                                       | 3x 3P16UL3/18                                                                                                                   |
|                       |                                                                                                                                                                 |             |                                                                                                                 | 34                    | 1x 2P16UL3/6 + 1x 2P16UL3/12<br>+ 1x 2P16UL3/18<br>2x 2P16UL3/12 + 1x 2P16UL3/18<br>2x 2P16UL3/18                               | Note: For detailed information and examples see page 20. |                                                                                                                                 |
|                       |                                                                                                                                                                 |             |                                                                                                                 | 36                    | 1x 2P16UL3/6 + 2x 2P16UL3/18<br>2x 2P16UL3/12 + 1x 2P16UL3/18<br>2x 2P16UL3/18                                                  |                                                          |                                                                                                                                 |



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: [ocean@oceanchips.ru](mailto:ocean@oceanchips.ru)

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А