



FL110A

Enclosures with plain door
steel colour RAL 7035

IP 65 / door closed
insulation class : I ↓
according to IEC 60529
1,5mm thick sheet steel for
body and door
These enclosures feature :

- 2 removable gland plate for cable entry on top and bottom,
- earth studs on both body and door,
- door easily removable,

plain door equipped with one or two locks with triangular 8mm bit centres, located out of the sealed area.

Options :

- key lock,
- wall fixing brackets,
- plain or perforated mounting plate,
- equipment kits for modular devices

For technical information see page T.7

| Designation | Characteristics | No. of locks | Ref. plain door | Ref. transpar. door |
|------------------------------------|--|--------------|-----------------|---------------------|
| Orion Plus metal enclosures | | | | |
| | dimensions : height x width x depth | | | |
| | 300 x 250 x 160 | 1 | FL 102A | FL 152A |
| | 350 x 300 x 160 | 1 | FL 104A | FL 154A |
| | 350 x 300 x 200 | 1 | FL 105A | FL 155A |
| | 500 x 300 x 200 | 1 | FL 110A | FL 160A |
| | 500 x 400 x 200 | 1 | FL 112A | FL 162A |
| | 650 x 400 x 200 | 2 | FL 117A | FL 167A |
| | 650 x 400 x 250 | 2 | FL 118A | FL 168A |
| | 650 x 500 x 200 | 2 | FL 119A | FL 169A |
| | 650 x 500 x 250 | 2 | FL 120A | FL 170A |
| | 800 x 600 x 250 | 2 | FL 123A | FL 173A |
| | 800 x 600 x 300 | 2 | FL 124A | FL 174A |
| | 950 x 600 x 250 | 2 | FL 125A | FL 175A |
| | 950 x 600 x 300 | 2 | FL 126A | FL 176A |
| | 950 x 800 x 250 | 2 | FL 127A | FL 177A |
| | 950 x 800 x 300 | 2 | FL 128A | FL 178A |
| | 1250 x 800 x 300 | 2 | FL 130A | FL 180A |



FL 110A








FL 958A

Plinth

height 50 mm

| | | |
|----------------------------|--|---------|
| for enclosure : | | |
| FL 119A 500 x 200 | | FL 957A |
| FL 120A 500 x 250 | | FL 958A |
| FL 123A 600 x 250 | | FL 959A |
| FL 126A 600 x 300 | | FL 960A |
| FL 127A 800 x 250 | | FL 961A |
| FL 128A, FL 130A 800 x 300 | | FL 962A |

* available 2nd half 2006

| <i>Designation</i> | <i>Characteristics</i> | <i>Ref.</i> | |
|---|--|---|---|
|  <p>FL 96Z</p> | <p>Key lock</p> <p>replace the triangular locks of origin</p> | <p>key lock to be mounted on the triangular lock</p> | <p>FL 96Z</p> |
|  <p>FL 80Z FL 95Z</p> | | <p>1 set of 2 key locks with male square 8mm, with 1 key</p> | <p>FL 80Z</p> |
|  <p>FL 85Z</p> | <p>Wall fixing brackets</p> <p>metal</p> | <p>metallic wall fixing brackets with screws</p> <p>set of 4 pieces</p> | <p>FL 95Z</p> <p>FL 85Z</p> |
|  <p>FL 874A</p> | | <p>Kit for connection to earth</p> <p>for metal enclosures</p> | <p>FL 874A</p> |
|  <p>FL 670A</p> | <p>Vertical connection kit</p> | | <p>FL 670A</p> |

* available 2nd half 2006



FL 216B

Enclosure with plain door

Made of glass reinforced polyester (GRP)

Colour : RAL 7035

FL 01B : RAL 7032

Body made out of one piece up to height 800mm

IP 65 / door closed IEC60529

insulation class : II according to IEC 61140

These enclosures feature :

- Plain door equipped with one or two locks with triangular 8mm centres, located out of the sealed area, gasket directly moulded on the door.

- studs in the back of the enclosure for mounting plate fastening.

Options :

- key lock,
- wall fixing brackets,
- plain or perforated mounting plate,
- equipment kits for modular devices.

For technical information see page T.8

| Designation | Characteristics | No of locks | Ref. plain door | Ref. transpar. door |
|----------------------------------|---|-------------|-----------------|---------------------|
| Orion Plus GRP enclosures | dimensions in mm : height x width x depth | | | |
| | heights : top and bottom parts | | | |
| | 300 x 250 x 160 | 1 | FL 201B | |
| | 350 x 300 x 160 | 1 | FL 204B | FL 254B |
| | 500 x 300 x 200 | 2 | FL 209B | FL 259B |
| | 500 x 400 x 200 | 2 | FL 213B | FL 263B |
| | 650 x 400 x 200 | 2 | FL 216B | FL 271B |
| | 650 x 500 x 250 | 2 | FL 221B | FL 279B |
| | 800 x 600 x 300 | 2 | FL 229B | FL 502B |
| | 1150 x 600 x 300 | 1 | FL 302B | FL 527B |
| | 1200 x 850 x 300 | 1 | FL 327B | |
| | 1450 x 850 x 300 * | 2 | FL 352B | |
| | 1750 x 850 x 300 * | 2 | FL 354B | |
| | 2050 x 1100 x 300 * | 2 | FL 368B | |

* enclosure with 2 superposed doors and a plinth height 70mm

FL 01B made of polycarbonate



FL 216B



FL 92Z



FL 81Z



FL 97Z

Locks

key locks to be mounted on the triangular lock, supplied with 2 keys n° 427

for enclosures h ≤ 800

for enclosures h ≥ 1150

FL 96Z

FL 98Z

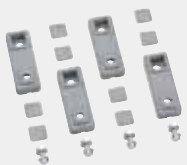
replacement of triangular lock of origin

1 set of 2 locks with male square 8mm with 1 key

FL 81Z

1 set of 2 locks double-bars 3mm with 1 key

FL 97Z



FL 863Z

Plastic wall fixing brackets

delivered with fixing screws M6x12 on enclosure set of 4 pieces

FL 863Z

* available 2nd half of 2006

Accessories for Orion Plus enclosure



FL 408A

| Designation | Characteristics | Dimensions L x H | Ref. |
|--|--------------------------------|------------------------------|---------|
| Plain mounting plates | | | |
| steel sheet 2mm thickness, aluminium zinc , | for enclosure : | | |
| | FL201B | 245 x 195 | FL 41G |
| | FL 102A, FL152A | 193 x 280 | FL 402A |
| | FL104A, FL105A, FL204B | 243 x 330 | FL 404A |
| | FL154A, FL155A, FL254B | | |
| assembly of the plates : | FL110A, FL209B | 243 x 480 | FL 407A |
| <input type="checkbox"/> fixed directly on the back of the enclosure, | FL160A, FL259B | | |
| <input type="checkbox"/> or on slides allowing the in- depth setting (fixing with slides FL450A) | FL112A, FL213B | 343 x 480 | FL 408A |
| | FL162A, FL263B | | |
| | FL117A, FL118A, FL216B | 343 x 630 | FL 412A |
| | FL167A, FL168A, FL266B | | |
| | FL119A, FL120A, FL221B | 443 x 630 | FL 413A |
| | FL169A, FL170A, FL271B | | |
| | FL123A, FL124A, FL229B | 543 x 780 | FL 415A |
| | FL173A, FL174A, FL279B | | |
| | FL125A, FL126A | 543 x 930 | FL 416A |
| | FL175A, FL176A | | |
| | FL127A, FL128A | 743 x 930 | FL 417A |
| | FL177A, FL178A | | |
| | FL 130A, FL180A | 743 x 1230 | FL 419A |
| | FL 302B, FL502B | 493 x 1080 | FL 512E |
| | FL 327B, FL527B | 693 x 1080 | FL 522E |
| | FL 352B | 693 x 480 (upper plate) | FL 520E |
| | | 693 x 780 (bottom plate) | FL 521E |
| | FL 354B | 693 x 480 (upper plate) | FL 520E |
| | | 693 x 1080 (bottom plate) | FL 522E |
| | FL 368B | 993 x 780 (upper plate) | FL 531E |
| | | 993 x 1080 (bottom plate) | FL 532E |
| Perforated mounting plate | | | |
| steel sheet 2mm thickness | for enclosure : | | |
| | FL 102A, FL152A | 193 x 280 | FL 472A |
| | FL 201B | | |
| | FL 104A, FL 105A, FL 204B | 243 x 330 | FL 473A |
| | FL154A, FL155A, FL254B | | |
| assembly of the plates : | FL 110A, FL 209B | 243 x 480 | FL 474A |
| <input type="checkbox"/> fixed directly on the back of the enclosure, | FL160A, FL259B | | |
| <input type="checkbox"/> or on slides allowing the in- depth setting (fixing with slides FL450A) | FL 112A, FL 213B | 343 x 480 | FL 475A |
| | FL162A, FL263B | | |
| | FL 117A, FL 118A, FL 216B | 343 x 630 | FL 476A |
| | FL167A, FL168A, FL266B | | |
| | FL119A, FL120A, FL221B | 443 x 630 | FL 477A |
| | FL169A, FL170A, FL271B | | |
| | FL 123A, FL 124A, FL 229B | 543 x 780 | FL479A |
| | FL173A, FL174A, FL279B | | |
| | FL 125A, FL 126A | 543 x 930 | FL 480A |
| | FL175A, FL176A | | |
| | FL 127A, FL 128A | 743 x 930 | FL 481A |
| | FL177A, FL178A | | |
| | FL 130A, FL180A | 743 x 1230 | FL 483A |
| Adjustment slides | | | |
| for assembly of the plates on depth | 4 slides delivered with screws | | FL 450A |
| Nut-clips and screw M5 | | | |
| for perforated mounting plate | 1 set = 25 nuts | | UC 969 |



FL 475A



UC 969

* available 2nd half of 2006

Designation *Characteristics* *Ref.*



FL 981A

Equipment kits
for modular devices

- on chassis
only FL 980A and FL 981A,

composed of
- rails DIN (slide length 44 mm) assembled on chassis and adjustable in depth (of front plates with slide)

for enclosures :
FL 104A, FL 105A, FL 204B 2 rows (24) ■
FL154A, FL155A, FL254B

FL 980A

FL 110A, FL 209B 3 rows (36) ■
FL160A, FL259B

FL 981A



- on vertical rail
composed of
- 2 vertical rail, DIN rail (slide length 44 mm)
- front plates with slit
- a cross-rail authorizing the assembly of bars on base and slides

FL 112A, FL 213B 3 rows (48) ■
FL162A, FL263B

FL 992A

FL 117A, FL 118A, FL 216B 4 rows (64) ■
FL167A, FL168A, FL266B

FL 993A

FL 119A, FL 120A, FL 221B 4 rows (88) ■
FL169A, FL170A, FL271B

FL 994A

FL 123A, FL 124A, FL 229B 5 rows (130) ■
FL173A, FL174A, FL279B

FL 996A

FL 125A, FL 126A 6 rows (156) ■
FL175A, FL176A

FL 997A

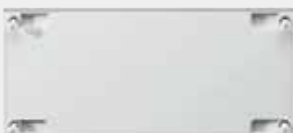
FL 127A, FL 128A 6 rows (222) ■
FL177A, FL178A

FL 998A

Adjustable DIN rails
in depth for terminal blocks
tilting 30°

for equipment kits with vertical rails

| | | |
|---|----------|----------------|
| for enclosures : | length : | |
| FL 112A, FL 117A, FL 118A, FL 213B, FL 216B, FL162A, FL167A, FL168A, FL263A, FL266B | 400 mm | FL 500A |
| FL 119A, FL 120A, FL 221B, FL169A, FL170A, FL271B | 500 mm | FL 501A |
| FL 123A, FL 124A, FL 125A, FL 126A, FL129A, FL 229B, FL173A, FL174A, FL175A, FL179A, FL176A, FL279B | 600 mm | FL 502E |
| FL 127A, FL 128A, FL130A, FL177A, FL178A, FL180A | 800 mm | FL 503E |



FL 712E

Plain front plates
for equipment kits
for modular devices,

replacement of the front plates with slits of origin

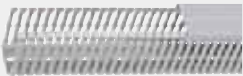



height : 150 mm

| | | |
|---|--------|----------------|
| for enclosures : | | |
| FL 104A, FL 105A, FL 110A, FL154A, FL155A, FL160A, FL 204B, FL254B | 300 mm | VP 03Z |
| FL 112A, FL 117A, FL 118A, FL162A, FL167A, FL168A, FL 213B, FL 216B, FL263B, FL266B | 400 mm | FL 712E |
| FL 119A, FL 120A, FL 221B, FL169A, FL170A, FL271B | 500 mm | FL 713E |
| FL 123A, FL 124A, FL 125A, FL 126A, FL129A, FL173A, FL174A, FL175A, FL179A, FL176A, FL279B, FL 229B | 600 mm | FL 714E |
| FL 127A, FL 128A, FL130A, FL177A, FL178A, FL180A | 800 mm | FL 715E |

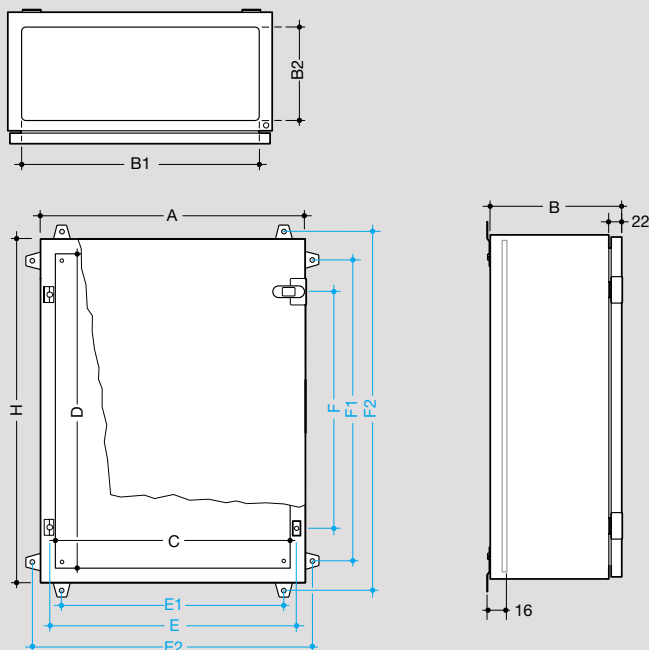
* available 2nd half of 2006

Accessories for Orion Plus enclosures

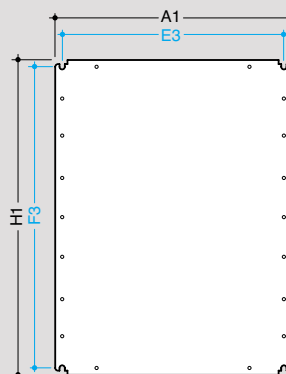


| | <i>Designation</i> | <i>Characteristics</i> | <i>Pack qty</i> | <i>Ref.</i> | |
|---|--|--|-----------------|-------------|----------------|
|  FL 70Z | Cable trunking horizontal and vertical | width x depth 25 x 60 mm | length. 2 x 2m | 2 | FL 70Z |
| | | 40 x 60 mm | length. 2 x 2m | 2 | FL 71Z |
|  UZ25V1 UZ25V2 | Wire guides to be fixed on the rail with support UZ 01V1 by simple rotation | large wire guide | | 20 | UZ 25V1 |
| | | small wire guide | | 20 | UZ 25V2 |
| | Supports for fixing for wire guides | clip fixing | | 20 | UZ 01V1 |
| | Blanking strip to blank a row (e.g. for terminals) on a front plate for modular devices (kit is composed of 6 pieces per 4 modules) | separable by 1/2 | length. 4 | 20 | FL 871Z |
| | Marking strip for front plates | includes : - adhesive transparent label holders - marking labels | length. 24 | 12 | JE 003 |
|  FL 672E | Setting slides in-depth of mounting plates | for enclosure : FL 302B, FL 327B, FL 352B, FL 354B, FL 368B | | 5 | FL 672E |
|  FZ 672Z | Painting aerosol can for the touch-up of the Orion Plus enclosures | colour RAL 7035 | | | FL 672Z |

Metal enclosures Orion Plus



Mounting plate



nota : foresee "A + 25 mm" to open the door

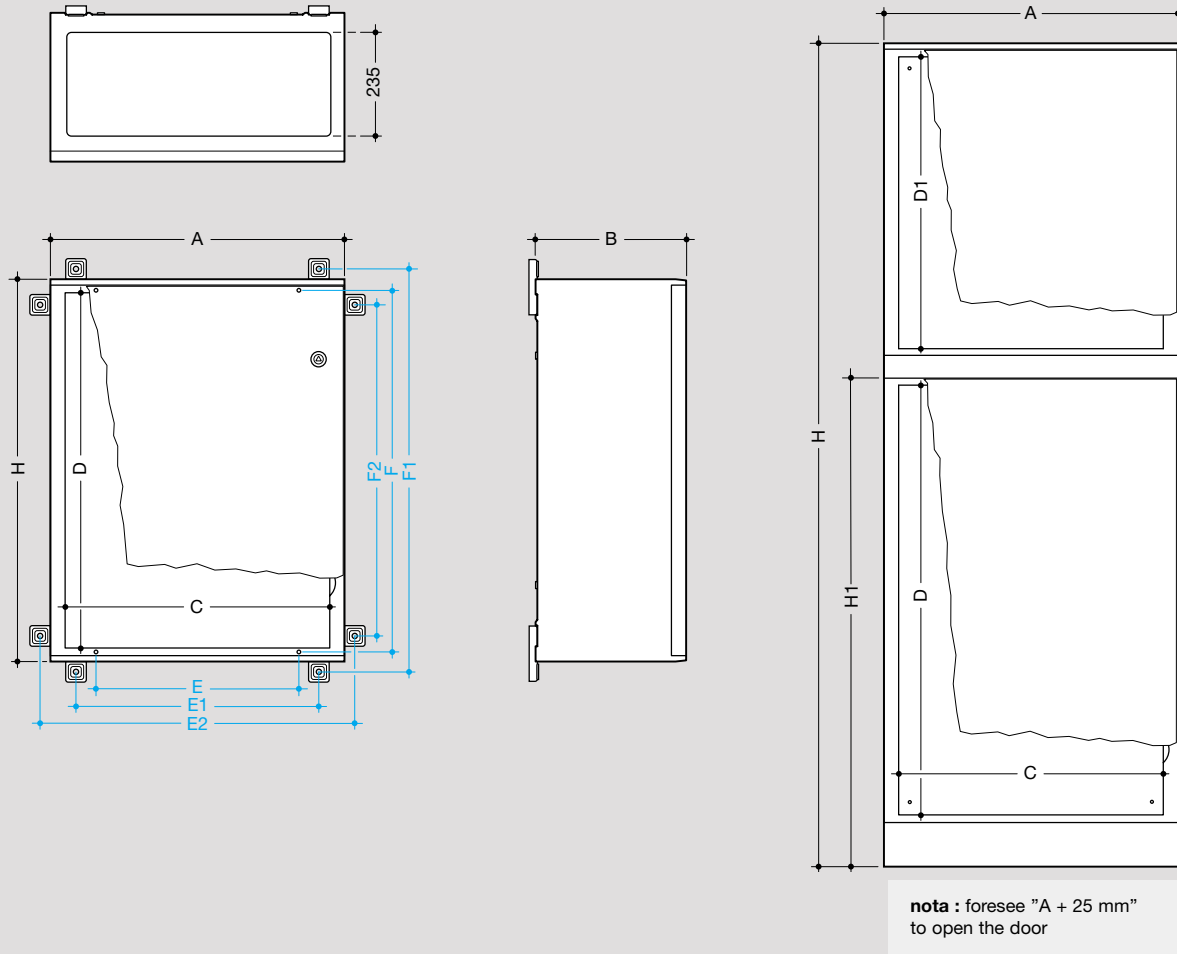
Dimensions

| references | rows | enclosure | | | | | | | outside fixing | | | | inside fixing | |
|------------|------|-----------|------|-----|-----|-----|-----|------|----------------|-----|------|------|---------------|------|
| | | A | H | B | B1 | B2 | C | D | E1 | E2 | F1 | F2 | E | F |
| FL 102A | - | 250 | 300 | 160 | 195 | 80 | 200 | 250 | 210 | 320 | 220 | 332 | 169 | 208 |
| FL 104A | 2 | 300 | 350 | 160 | 245 | 80 | 250 | 300 | 260 | 370 | 272 | 382 | 219 | 258 |
| FL 105A | 2 | 300 | 350 | 200 | 245 | 120 | 250 | 300 | 260 | 370 | 272 | 382 | 219 | 258 |
| FL 110A | 3 | 300 | 500 | 200 | 245 | 120 | 250 | 450 | 260 | 370 | 422 | 532 | 219 | 408 |
| FL 112A | 3 | 400 | 500 | 200 | 345 | 120 | 350 | 450 | 360 | 470 | 422 | 532 | 319 | 408 |
| FL 117A | 4 | 400 | 650 | 200 | 345 | 120 | 350 | 600 | 360 | 470 | 572 | 682 | 319 | 558 |
| FL 118A | 4 | 400 | 650 | 250 | 345 | 170 | 350 | 600 | 360 | 470 | 572 | 682 | 319 | 558 |
| FL 119A | 4 | 500 | 650 | 200 | 445 | 120 | 450 | 600 | 460 | 570 | 572 | 682 | 419 | 558 |
| FL 120A | 4 | 500 | 650 | 250 | 445 | 170 | 450 | 600 | 460 | 570 | 572 | 682 | 419 | 558 |
| FL 123A | 5 | 600 | 800 | 250 | 545 | 170 | 550 | 750 | 560 | 670 | 722 | 832 | 519 | 708 |
| FL 124A | 5 | 600 | 800 | 300 | 545 | 220 | 550 | 750 | 560 | 670 | 722 | 832 | 519 | 708 |
| FL 125A | 6 | 600 | 950 | 250 | 545 | 170 | 550 | 900 | 560 | 670 | 872 | 982 | 519 | 858 |
| FL 126A | 6 | 600 | 950 | 300 | 545 | 220 | 550 | 900 | 560 | 670 | 872 | 982 | 519 | 858 |
| FL 127A | 6 | 800 | 950 | 250 | 745 | 170 | 750 | 900 | 760 | 870 | 872 | 982 | 719 | 858 |
| FL 128A | 6 | 800 | 950 | 300 | 745 | 220 | 750 | 900 | 760 | 870 | 872 | 982 | 719 | 858 |
| FL 130A | - | 800 | 1250 | 300 | 745 | 220 | 750 | 1200 | 760 | 870 | 1172 | 1282 | 719 | 1158 |

Dimensions of mounting plates

| full plates | perforated plates | for enclosures | dimensions plates | | plates fixing | |
|-------------|-------------------|---------------------------|-------------------|------|---------------|------|
| | | | A1 | H1 | E3 | F3 |
| FL 402A | FL 472A | FL 102A | 193 | 280 | 169 | 208 |
| FL 404A | FL 473A | FL 104A, FL 105A, FL 204B | 243 | 330 | 219 | 258 |
| FL 407A | FL 474A | FL 110A, FL 209B | 243 | 480 | 219 | 258 |
| FL 408A | FL 475A | FL 112A, FL 213B | 343 | 480 | 219 | 408 |
| FL 412A | FL 476A | FL 117A, FL 118A, FL 216B | 343 | 630 | 319 | 408 |
| FL 413A | FL 477A | FL 120A, FL 221B | 443 | 630 | 319 | 558 |
| FL 415A | FL 479A | FL 123A, FL 124A, FL 229B | 543 | 780 | 319 | 558 |
| FL 416A | FL 480A | FL 125A, FL 126A | 543 | 930 | 419 | 558 |
| FL 417A | FL 481A | FL 127A, FL 128A | 743 | 930 | 419 | 558 |
| FL 419A | FL 483A | FL 130A | 743 | 1230 | 519 | 708 |
| FL 512E | | FL 302B | 493 | 1080 | 519 | 708 |
| FL 520E | | FL 352B, FL 354B | 693 | 480 | 519 | 858 |
| FL 521E | | FL 352B | 693 | 780 | 519 | 858 |
| FL 522E | | FL 327B, FL 354B | 693 | 1080 | 719 | 858 |
| FL 531E | | FL 368B | 993 | 780 | 719 | 858 |
| FL 532E | | FL 368B | 993 | 1080 | 719 | 1158 |

GRP enclosures Orion Plus



Dimensions

| references | rows | enclosure | | inside fixing | | | | | | outside fixing | | | | |
|------------|------|-----------|------|---------------|-----|------|------|-----|-----|----------------|-----|-----|-----|-----|
| | | A | H | H1 | B | C | D | D1 | E | F | E1 | E2 | F1 | F2 |
| FL 204B | 2 | 300 | 350 | - | 160 | 250 | 300 | - | 219 | 258 | 339 | 339 | 269 | 389 |
| FL 209B | 3 | 300 | 500 | - | 200 | 250 | 450 | - | 219 | 408 | 339 | 339 | 419 | 539 |
| FL 213B | 3 | 400 | 500 | - | 200 | 350 | 450 | - | 319 | 408 | 439 | 439 | 419 | 539 |
| FL 216B | 4 | 400 | 650 | - | 200 | 350 | 600 | - | 319 | 558 | 439 | 439 | 569 | 689 |
| FL 221B | 4 | 500 | 650 | - | 250 | 450 | 600 | - | 419 | 558 | 539 | 539 | 569 | 689 |
| FL 229B | 5 | 600 | 800 | - | 300 | 550 | 750 | - | 519 | 708 | 639 | 639 | 719 | 839 |
| FL 302B | - | 600 | 1150 | - | 300 | 500 | 1050 | - | - | - | - | - | - | - |
| FL 327B | - | 850 | 1200 | - | 300 | 750 | 1050 | - | - | - | - | - | - | - |
| FL 352B | - | 850 | 1450 | 810 | 300 | 750 | 750 | 510 | - | - | - | - | - | - |
| FL 354B | - | 850 | 1750 | 1100 | 300 | 750 | 1050 | 510 | - | - | - | - | - | - |
| FL 368B | - | 1100 | 2050 | 1110 | 300 | 1000 | 1050 | 510 | - | - | - | - | - | - |