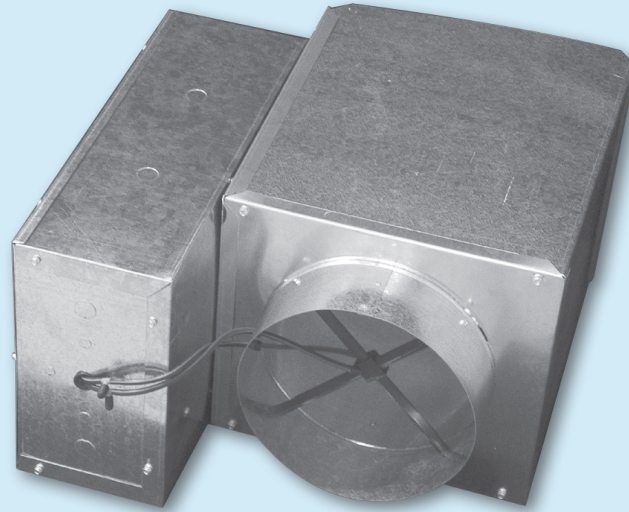


# KVV-S

## Kitchen Variable Air Volume Terminal Unit



- Available in many sizes; mounts in almost any square or rectangular duct.
- Gasketing around the orifice plate and mounting plate give the unit a tight seal inside the existing duct.
- Interior housing fully insulated.
- Multi-point center averaging sensor amplifies flow signal for best control of low flow rates; center averaging feature provides signal accuracy, regardless of inlet duct configuration.
- Multi-blade damper is constructed of heavy gage galvanized steel to prevent vibration under high pressure conditions.
- Elastomer seals on edges of damper blades allow low leakage during full shut off.
- Formed flanges provide added duct stiffness at insertion point.
- Casing may be configured to mount on either right or left side of existing duct.

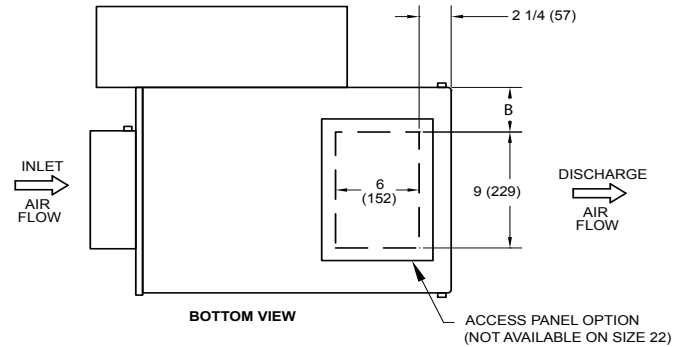
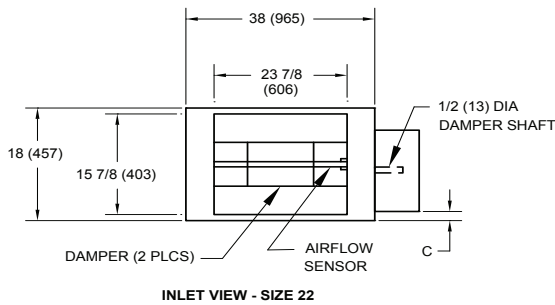
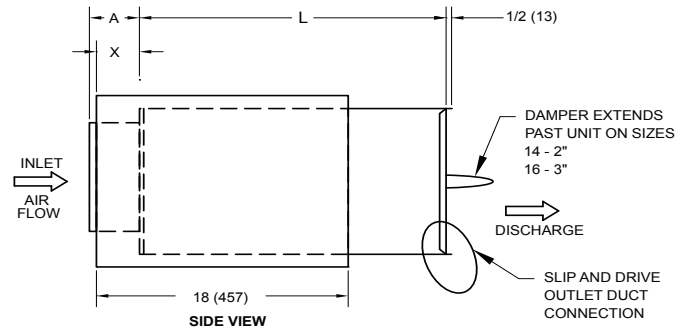
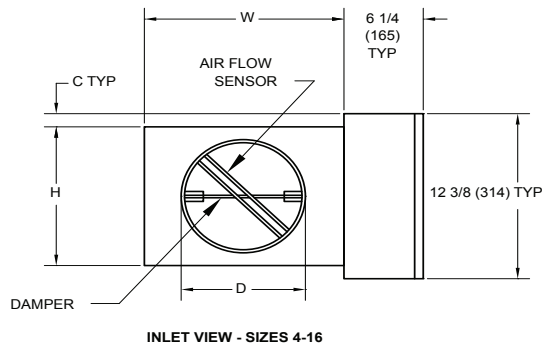
Halton's Slide-In Terminal Units convert constant volume or booster coil systems into modern, energy efficient variable air volume systems.

Slide-in terminal units are designed to transform inefficient constant volume systems to present day variable air volume systems with low installation costs. The resulting performance of a system incorporating the Halton's KVV-R series terminal units approaches that of a VAV system using single duct terminal units.

### Unit Capacities

| Inlet Size | Max. Primary Airflow - CFM | Standard Min. Airflow - CFM |
|------------|----------------------------|-----------------------------|
| 4          | 230                        | 40                          |
| 5          | 360                        | 62                          |
| 6          | 515                        | 89                          |
| 7          | 700                        | 121                         |
| 8          | 920                        | 159                         |
| 9          | 1160                       | 201                         |
| 10         | 1430                       | 248                         |
| 12         | 2060                       | 357                         |
| 14         | 2800                       | 486                         |
| 16         | 3660                       | 634                         |
| 22         | 7000                       | 1212                        |

## Dimensions



## KVV-S Unit with Electronic Controls, Dimensional Details

| Inlet Size | Max. CFM [L/s] | L             | W<br>Outlet Width | H<br>Outlet Height | A            | B            | C           | D             | X            |
|------------|----------------|---------------|-------------------|--------------------|--------------|--------------|-------------|---------------|--------------|
| 4          | 230 (109)      | 15 1/2" (394) | 12" (305)         | 8" (203)           | 5 3/8" (136) | 1 1/2" (38)  | 2 1/8" (54) | 3 7/8" (98)   | 7 1/4" (184) |
| 5          | 360 (170)      | 15 1/2" (394) | 12" (305)         | 8" (203)           | 5 3/8" (136) | 1 1/2" (38)  | 2 1/8" (54) | 4 7/8" (124)  | 7 1/4" (184) |
| 6          | 515 (243)      | 15 1/2" (394) | 12" (305)         | 8" (203)           | 3 3/8" (86)  | 1 1/2" (38)  | 2 1/8" (54) | 5 7/8" (149)  | 7 1/4" (184) |
| 7          | 700 (330)      | 15 1/2" (394) | 12" (305)         | 10" (254)          | 3 3/8" (86)  | 1 1/2" (38)  | 1 1/8" (29) | 6 7/8" (175)  | 7 1/4" (184) |
| 8          | 920 (434)      | 15 1/2" (394) | 12" (305)         | 10" (254)          | 3 3/8" (86)  | 1 1/2" (38)  | 1 1/8" (29) | 7 7/8" (200)  | 7 1/4" (184) |
| 9          | 1160 (547)     | 15 1/2" (394) | 14" (356)         | 12 1/2" (318)      | 3 3/8" (86)  | 2 1/2" (64)  | -           | 8 7/8" (225)  | 5 1/4" (133) |
| 10         | 1430 (675)     | 15 1/2" (394) | 14" (356)         | 12 1/2" (318)      | 3 3/8" (86)  | 2 1/2" (64)  | -           | 9 7/8" (251)  | 5 1/4" (133) |
| 12         | 2060 (972)     | 15 1/2" (394) | 16" (406)         | 15" (381)          | 3 3/8" (86)  | 3 1/2" (89)  | -           | 11 7/8" (302) | 5 1/4" (133) |
| 14         | 2800 (1321)    | 15 1/2" (394) | 20" (508)         | 17 1/2" (445)      | 3 3/8" (86)  | 5 1/2" (140) | -           | 13 7/8" (352) | 3 1/4" (83)  |
| 16         | 3660 (1727)    | 15 1/2" (394) | 24" (610)         | 18" (457)          | 3 3/8" (86)  | 7 1/2" (191) | -           | 15 7/8" (403) | 3 1/4" (83)  |
| 22         | 7000 (3304)    | 15" (381)     | 38" (965)         | 18" (457)          | 4 1/4" (108) | -            | 1 1/8" (29) | See Above     | 5 1/4" (133) |

**Notes:** Dimensions in parentheses are mm. Right hand KVV-S with electronic controls enclosure shown: left-hand is available.

# PERFORMANCE SOUND DATA - DISCHARGE

Form#: SS055\_KVV-S  
Date:08-2018 - Rev2

| Unit Size | Flow Rate |        | Min Δ Ps |         | 0.75" Δ Ps                  |    |    |    |    |    |    | 1.5" Δ Ps |                             |    |    |    |    |    | 2.5" Δ Ps |    |                             |    |    |    |    |
|-----------|-----------|--------|----------|---------|-----------------------------|----|----|----|----|----|----|-----------|-----------------------------|----|----|----|----|----|-----------|----|-----------------------------|----|----|----|----|
|           |           |        |          |         | Octave Band Sound Power, Lw |    |    |    |    |    |    | Lp        | Octave Band Sound Power, Lw |    |    |    |    |    |           | Lp | Octave Band Sound Power, Lw |    |    |    |    |
|           | CFM       | (L/s)  | "WG      | (Pa)    | 2                           | 3  | 4  | 5  | 6  | 7  | NC | 2         | 3                           | 4  | 5  | 6  | 7  | NC | 2         | 3  | 4                           | 5  | 6  | 7  | NC |
| 4         | 50        | (24)   | 0.011    | (2.76)  | 53                          | 41 | 35 | 34 | 29 | 25 | -  | 54        | 42                          | 39 | 38 | 33 | 31 | -  | 55        | 43 | 42                          | 41 | 36 | 35 | -  |
|           | 110       | (52)   | 0.054    | (13.37) | 63                          | 56 | 47 | 43 | 40 | 34 | -  | 64        | 58                          | 51 | 47 | 44 | 40 | 20 | 65        | 59 | 53                          | 50 | 47 | 44 | 21 |
|           | 150       | (71)   | 0.100    | (24.88) | 68                          | 62 | 52 | 47 | 45 | 38 | 24 | 69        | 64                          | 55 | 51 | 49 | 44 | 26 | 69        | 65 | 58                          | 54 | 51 | 48 | 27 |
|           | 230       | (109)  | 0.235    | (58.51) | 73                          | 71 | 58 | 52 | 51 | 43 | 32 | 74        | 72                          | 62 | 56 | 55 | 49 | 33 | 75        | 73 | 64                          | 59 | 57 | 53 | 34 |
| 5         | 60        | (28)   | 0.006    | (1.43)  | 49                          | 41 | 39 | 31 | 30 | 25 | -  | 52        | 44                          | 44 | 35 | 35 | 31 | -  | 55        | 47 | 47                          | 38 | 38 | 35 | -  |
|           | 140       | (66)   | 0.031    | (7.80)  | 60                          | 55 | 50 | 43 | 39 | 34 | -  | 63        | 59                          | 55 | 47 | 44 | 40 | -  | 66        | 61 | 58                          | 50 | 48 | 45 | 22 |
|           | 250       | (118)  | 0.100    | (24.88) | 67                          | 66 | 58 | 50 | 46 | 41 | 25 | 71        | 69                          | 62 | 54 | 50 | 47 | 29 | 73        | 72 | 66                          | 57 | 54 | 51 | 32 |
|           | 360       | (170)  | 0.207    | (51.60) | 72                          | 72 | 63 | 55 | 50 | 45 | 31 | 76        | 75                          | 67 | 59 | 55 | 51 | 35 | 78        | 78 | 70                          | 62 | 58 | 55 | 38 |
| 6         | 100       | (47)   | 0.006    | (1.56)  | 57                          | 47 | 35 | 31 | 33 | 29 | -  | 55        | 52                          | 40 | 35 | 38 | 36 | -  | 57        | 56 | 44                          | 39 | 42 | 41 | -  |
|           | 250       | (118)  | 0.039    | (9.72)  | 62                          | 59 | 49 | 44 | 41 | 36 | -  | 66        | 64                          | 54 | 48 | 46 | 43 | 23 | 68        | 68 | 58                          | 51 | 50 | 48 | 28 |
|           | 400       | (189)  | 0.100    | (24.88) | 68                          | 65 | 56 | 50 | 45 | 40 | 23 | 71        | 70                          | 62 | 54 | 50 | 47 | 29 | 74        | 74 | 66                          | 57 | 54 | 52 | 33 |
|           | 520       | (245)  | 0.169    | (42.05) | 71                          | 68 | 60 | 54 | 47 | 43 | 27 | 74        | 73                          | 66 | 58 | 53 | 50 | 33 | 77        | 77 | 70                          | 61 | 57 | 55 | 37 |
| 7         | 120       | (57)   | 0.005    | (1.18)  | 56                          | 54 | 33 | 28 | 32 | 32 | -  | 60        | 60                          | 39 | 32 | 38 | 40 | -  | 63        | 65 | 43                          | 34 | 43 | 45 | 25 |
|           | 330       | (156)  | 0.036    | (8.96)  | 65                          | 61 | 48 | 44 | 42 | 41 | -  | 69        | 68                          | 54 | 48 | 48 | 48 | 27 | 72        | 73 | 58                          | 50 | 52 | 54 | 32 |
|           | 550       | (260)  | 0.100    | (24.88) | 69                          | 65 | 56 | 53 | 47 | 45 | 23 | 73        | 72                          | 61 | 56 | 53 | 52 | 31 | 76        | 76 | 66                          | 59 | 57 | 58 | 37 |
|           | 700       | (330)  | 0.162    | (40.31) | 71                          | 67 | 59 | 57 | 49 | 47 | 24 | 75        | 73                          | 65 | 60 | 55 | 54 | 32 | 78        | 78 | 69                          | 62 | 59 | 60 | 38 |
| 8         | 160       | (76)   | 0.005    | (1.30)  | 57                          | 51 | 42 | 34 | 37 | 33 | -  | 60        | 57                          | 48 | 39 | 42 | 40 | -  | 62        | 61 | 53                          | 42 | 47 | 45 | -  |
|           | 440       | (208)  | 0.040    | (9.83)  | 66                          | 61 | 52 | 47 | 45 | 41 | -  | 69        | 67                          | 58 | 52 | 51 | 48 | 25 | 72        | 71 | 62                          | 55 | 55 | 53 | 30 |
|           | 700       | (330)  | 0.100    | (24.88) | 70                          | 66 | 56 | 53 | 49 | 44 | 24 | 74        | 71                          | 62 | 58 | 54 | 51 | 31 | 76        | 76 | 67                          | 61 | 58 | 56 | 36 |
|           | 920       | (434)  | 0.173    | (42.98) | 73                          | 68 | 59 | 56 | 51 | 46 | 26 | 76        | 74                          | 65 | 51 | 57 | 53 | 33 | 78        | 78 | 69                          | 64 | 61 | 58 | 38 |
| 9         | 200       | (94)   | 0.005    | (1.23)  | 50                          | 46 | 35 | 32 | 35 | 35 | -  | 53        | 51                          | 39 | 36 | 40 | 42 | -  | 55        | 54 | 43                          | 39 | 44 | 46 | -  |
|           | 550       | (260)  | 0.037    | (9.29)  | 62                          | 57 | 49 | 46 | 44 | 42 | -  | 65        | 62                          | 54 | 50 | 50 | 48 | -  | 67        | 66 | 57                          | 53 | 53 | 53 | 24 |
|           | 900       | (425)  | 0.100    | (24.88) | 68                          | 63 | 56 | 53 | 49 | 46 | -  | 71        | 68                          | 61 | 57 | 54 | 52 | 25 | 73        | 71 | 64                          | 59 | 58 | 56 | 30 |
|           | 1160      | (547)  | 0.166    | (41.34) | 72                          | 66 | 60 | 56 | 52 | 47 | 23 | 74        | 71                          | 65 | 60 | 57 | 53 | 29 | 76        | 74 | 68                          | 63 | 60 | 58 | 33 |
| 10        | 250       | (118)  | 0.005    | (1.29)  | 50                          | 48 | 40 | 38 | 39 | 37 | -  | 53        | 53                          | 45 | 42 | 45 | 43 | -  | 55        | 57 | 48                          | 45 | 49 | 48 | -  |
|           | 700       | (330)  | 0.040    | (10.08) | 62                          | 58 | 52 | 49 | 48 | 45 | -  | 65        | 63                          | 57 | 54 | 53 | 51 | 21 | 68        | 67 | 61                          | 57 | 57 | 55 | 26 |
|           | 1100      | (519)  | 0.100    | (24.88) | 68                          | 63 | 58 | 54 | 51 | 48 | -  | 71        | 68                          | 63 | 59 | 57 | 54 | 26 | 73        | 72 | 67                          | 62 | 61 | 58 | 30 |
|           | 1450      | (684)  | 0.174    | (43.24) | 71                          | 66 | 61 | 58 | 53 | 50 | 23 | 74        | 71                          | 66 | 62 | 59 | 56 | 29 | 77        | 74 | 70                          | 65 | 63 | 61 | 33 |
| 12        | 400       | (189)  | 0.006    | (1.56)  | 52                          | 47 | 39 | 42 | 42 | 42 | -  | 56        | 52                          | 43 | 46 | 47 | 48 | -  | 58        | 56 | 46                          | 50 | 50 | 52 | -  |
|           | 1000      | (472)  | 0.039    | (9.72)  | 64                          | 58 | 53 | 52 | 50 | 48 | -  | 68        | 63                          | 57 | 56 | 55 | 54 | -  | 70        | 67 | 60                          | 60 | 58 | 58 | 24 |
|           | 1600      | (755)  | 0.100    | (24.88) | 71                          | 63 | 60 | 57 | 54 | 51 | 22 | 74        | 68                          | 64 | 61 | 59 | 57 | 26 | 77        | 72 | 67                          | 65 | 62 | 61 | 30 |
|           | 2060      | (972)  | 0.166    | (41.25) | 74                          | 66 | 63 | 59 | 56 | 52 | 26 | 78        | 71                          | 68 | 64 | 61 | 58 | 30 | 80        | 75 | 71                          | 67 | 64 | 63 | 34 |
| 14        | 480       | (227)  | 0.005    | (1.30)  | 47                          | 44 | 33 | 39 | 38 | 40 | -  | 50        | 48                          | 37 | 43 | 42 | 46 | -  | 52        | 52 | 39                          | 46 | 45 | 50 | -  |
|           | 1375      | (649)  | 0.043    | (10.67) | 64                          | 58 | 53 | 52 | 50 | 48 | -  | 67        | 62                          | 56 | 56 | 54 | 54 | -  | 69        | 65 | 58                          | 59 | 57 | 58 | 22 |
|           | 2100      | (991)  | 0.100    | (24.88) | 71                          | 63 | 60 | 58 | 55 | 52 | 22 | 74        | 68                          | 63 | 61 | 59 | 57 | 26 | 76        | 71 | 66                          | 64 | 62 | 62 | 29 |
|           | 2800      | (1321) | 0.178    | (44.24) | 75                          | 67 | 66 | 61 | 58 | 54 | 28 | 78        | 71                          | 69 | 65 | 62 | 60 | 32 | 81        | 75 | 71                          | 68 | 65 | 64 | 35 |
| 16        | 630       | (297)  | 0.005    | (1.26)  | 41                          | 37 | 22 | 31 | 30 | 29 | -  | 44        | 41                          | 26 | 34 | 35 | 34 | -  | 47        | 45 | 28                          | 37 | 38 | 38 | -  |
|           | 1775      | (838)  | 0.040    | (10.00) | 62                          | 55 | 49 | 48 | 46 | 44 | -  | 65        | 60                          | 52 | 52 | 51 | 50 | -  | 68        | 63 | 55                          | 55 | 54 | 54 | -  |
|           | 2800      | (1321) | 0.100    | (24.88) | 71                          | 63 | 60 | 56 | 53 | 51 | 23 | 75        | 68                          | 64 | 60 | 58 | 56 | 27 | 77        | 71 | 66                          | 63 | 61 | 60 | 30 |
|           | 3660      | (1727) | 0.171    | (42.52) | 77                          | 68 | 67 | 61 | 58 | 55 | 30 | 80        | 72                          | 71 | 64 | 62 | 60 | 34 | 83        | 76 | 73                          | 67 | 65 | 64 | 37 |
| 22        | 1200      | (566)  | 0.005    | (1.27)  | 67                          | 57 | 55 | 50 | 46 | 38 | -  | 73        | 65                          | 58 | 55 | 51 | 44 | 25 | 78        | 70 | 60                          | 59 | 55 | 49 | 31 |
|           | 3300      | (1557) | 0.039    | (9.64)  | 78                          | 69 | 71 | 65 | 61 | 56 | 31 | 84        | 77                          | 73 | 70 | 67 | 62 | 39 | 88        | 82 | 76                          | 74 | 71 | 67 | 44 |
|           | 5300      | (2501) | 0.100    | (24.86) | 83                          | 75 | 78 | 72 | 69 | 65 | 37 | 89        | 82                          | 81 | 77 | 74 | 71 | 45 | 93        | 88 | 83                          | 81 | 78 | 76 | 51 |
|           | 7000      | (3304) | 0.174    | (43.37) | 86                          | 78 | 82 | 76 | 73 | 70 | 41 | 92        | 86                          | 85 | 81 | 78 | 76 | 49 | 96        | 91 | 87                          | 85 | 82 | 81 | 54 |

**PERFORMANCE SOUND DATA - RADIATED**

Form#: SS055\_KVV-S  
Date: 08-2018 - Rev2

| Unit Size | Flow Rate   |       | Min Δ Ps |         | 0.75" Δ Ps                  |           |           |           |           |           |           | 1.5" Δ Ps |                             |    |    |    |    |           | 2.5" Δ Ps |    |                             |    |    |    |           |
|-----------|-------------|-------|----------|---------|-----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------------------------|----|----|----|----|-----------|-----------|----|-----------------------------|----|----|----|-----------|
|           |             |       |          |         | Octave Band Sound Power, Lw |           |           |           |           |           |           | Lp        | Octave Band Sound Power, Lw |    |    |    |    |           |           | Lp | Octave Band Sound Power, Lw |    |    |    |           |
|           | CFM         | (L/s) | "WG      | (Pa)    | 2                           | 3         | 4         | 5         | 6         | 7         | NC        | 2         | 3                           | 4  | 5  | 6  | 7  | NC        | 2         | 3  | 4                           | 5  | 6  | 7  | NC        |
| 4         | 50 (24)     |       | 0.011    | (2.76)  | 37                          | 28        | 24        | 23        | 17        | 10        | -         | 38        | 29                          | 27 | 25 | 19 | 15 | -         | 38        | 30 | 30                          | 27 | 21 | 18 | -         |
|           | 110 (52)    |       | 0.054    | (13.37) | 50                          | 42        | 34        | 33        | 30        | 23        | -         | 51        | 43                          | 38 | 35 | 32 | 28 | -         | 51        | 45 | 40                          | 37 | 34 | 31 | -         |
|           | 150 (71)    |       | 0.100    | (24.88) | 55                          | 47        | 39        | 37        | 35        | 29        | -         | 56        | 49                          | 42 | 40 | 37 | 33 | -         | 56        | 50 | 45                          | 41 | 39 | 37 | -         |
|           | 230 (109)   |       | 0.235    | (58.51) | 62                          | 55        | 45        | 43        | 42        | 36        | <b>24</b> | 62        | 57                          | 48 | 45 | 44 | 40 | <b>26</b> | 63        | 58 | 51                          | 47 | 46 | 44 | <b>27</b> |
| 5         | 60 (28)     |       | 0.006    | (1.43)  | 38                          | 21        | 17        | 12        | 8         | 6         | -         | 43        | 26                          | 22 | 15 | 11 | 12 | -         | 47        | 30 | 26                          | 18 | 14 | 17 | -         |
|           | 140 (66)    |       | 0.031    | (7.80)  | 47                          | 36        | 30        | 26        | 22        | 17        | -         | 52        | 41                          | 35 | 29 | 25 | 23 | -         | 56        | 45 | 39                          | 32 | 28 | 28 | -         |
|           | 250 (118)   |       | 0.100    | (24.88) | 53                          | 47        | 39        | 36        | 31        | 25        | -         | 59        | 52                          | 44 | 39 | 35 | 31 | <b>20</b> | 62        | 55 | 47                          | 41 | 38 | 36 | <b>25</b> |
|           | 360 (170)   |       | 0.207    | (51.60) | 57                          | 53        | 44        | 42        | 37        | 30        | <b>21</b> | 62        | 58                          | 49 | 45 | 41 | 36 | <b>27</b> | 66        | 62 | 53                          | 47 | 44 | 41 | <b>31</b> |
| 6         | 100 (47)    |       | 0.006    | (1.56)  | 43                          | 35        | 24        | 15        | 10        | 6         | -         | 46        | 40                          | 28 | 20 | 16 | 13 | -         | 49        | 44 | 31                          | 24 | 20 | 19 | -         |
|           | 250 (118)   |       | 0.039    | (9.72)  | 52                          | 47        | 38        | 28        | 23        | 19        | -         | 56        | 52                          | 43 | 33 | 29 | 26 | -         | 58        | 55 | 46                          | 37 | 33 | 32 | <b>24</b> |
|           | 400 (189)   |       | 0.100    | (24.88) | 57                          | 53        | 46        | 35        | 30        | 26        | <b>21</b> | 60        | 58                          | 50 | 40 | 36 | 33 | <b>27</b> | 63        | 61 | 53                          | 43 | 40 | 38 | <b>31</b> |
|           | 520 (245)   |       | 0.169    | (42.05) | 60                          | 56        | 50        | 39        | 34        | 29        | <b>25</b> | 63        | 61                          | 54 | 43 | 39 | 37 | <b>30</b> | 65        | 64 | 57                          | 47 | 43 | 42 | <b>35</b> |
| 7         | 120 (57)    |       | 0.005    | (1.18)  | 38                          | 42        | 25        | 17        | 12        | 7         | -         | 42        | 47                          | 31 | 21 | 16 | 14 | -         | 44        | 51 | 35                          | 24 | 19 | 19 | -         |
|           | 330 (156)   |       | 0.036    | (8.96)  | 50                          | 48        | 38        | 31        | 27        | 22        | -         | 54        | 54                          | 44 | 36 | 31 | 28 | <b>22</b> | 57        | 58 | 49                          | 39 | 34 | 33 | <b>27</b> |
|           | 550 (260)   |       | 0.100    | (24.88) | 56                          | 52        | 45        | 39        | 34        | 29        | -         | 60        | 57                          | 51 | 43 | 39 | 35 | <b>26</b> | 63        | 61 | 55                          | 46 | 42 | 40 | <b>31</b> |
|           | 700 (330)   |       | 0.162    | (40.31) | <b>59</b>                   | <b>53</b> | <b>48</b> | <b>42</b> | <b>38</b> | <b>32</b> | <b>23</b> | 63        | 59                          | 54 | 46 | 42 | 38 | <b>29</b> | 66        | 63 | 59                          | 50 | 45 | 43 | <b>34</b> |
| 8         | 160 (76)    |       | 0.005    | (1.30)  | 45                          | 39        | 27        | 22        | 18        | 16        | -         | 48        | 45                          | 34 | 27 | 23 | 23 | -         | 50        | 49 | 39                          | 30 | 27 | 28 | -         |
|           | 440 (208)   |       | 0.040    | (9.83)  | 55                          | 49        | 38        | 33        | 28        | 26        | -         | 58        | 54                          | 45 | 38 | 33 | 33 | <b>23</b> | 60        | 59 | 50                          | 41 | 37 | 38 | <b>28</b> |
|           | 700 (330)   |       | 0.100    | (24.88) | 59                          | 53        | 43        | 38        | 32        | 31        | <b>21</b> | 62        | 59                          | 49 | 43 | 38 | 38 | <b>28</b> | 64        | 63 | 55                          | 46 | 41 | 43 | <b>33</b> |
|           | 920 (434)   |       | 0.173    | (42.98) | 62                          | 56        | 45        | 41        | 35        | 34        | <b>24</b> | 65        | 62                          | 52 | 46 | 40 | 41 | <b>31</b> | 67        | 66 | 57                          | 49 | 44 | 46 | <b>37</b> |
| 9         | 200 (94)    |       | 0.005    | (1.23)  | 38                          | 36        | 21        | 22        | 21        | 19        | -         | 42        | 42                          | 26 | 26 | 26 | 27 | -         | 44        | 47 | 29                          | 29 | 30 | 33 | -         |
|           | 550 (260)   |       | 0.037    | (9.29)  | 50                          | 45        | 38        | 33        | 30        | 24        | -         | 54        | 51                          | 42 | 37 | 35 | 32 | -         | 56        | 56 | 45                          | 42 | 39 | 38 | <b>25</b> |
|           | 900 (425)   |       | 0.100    | (24.88) | 56                          | 49        | 46        | 38        | 34        | 27        | -         | 60        | 56                          | 50 | 42 | 39 | 35 | <b>24</b> | 62        | 60 | 53                          | 45 | 43 | 41 | <b>30</b> |
|           | 1160 (547)  |       | 0.166    | (41.34) | 59                          | 52        | 50        | 41        | 37        | 28        | <b>24</b> | 63        | 58                          | 54 | 45 | 42 | 36 | <b>28</b> | 65        | 63 | 57                          | 48 | 46 | 42 | <b>32</b> |
| 10        | 250 (118)   |       | 0.005    | (1.29)  | 33                          | 33        | 17        | 16        | 11        | 3         | -         | 39        | 39                          | 21 | 20 | 19 | 14 | -         | 43        | 44 | 23                          | 24 | 25 | 23 | -         |
|           | 700 (330)   |       | 0.040    | (10.08) | 46                          | 43        | 37        | 31        | 24        | 15        | -         | 52        | 50                          | 41 | 36 | 32 | 27 | -         | 56        | 54 | 44                          | 40 | 38 | 35 | <b>23</b> |
|           | 1100 (519)  |       | 0.100    | (24.88) | 52                          | 48        | 46        | 38        | 30        | 21        | <b>20</b> | 58        | 54                          | 50 | 43 | 38 | 32 | <b>24</b> | 62        | 59 | 52                          | 46 | 44 | 41 | <b>28</b> |
|           | 1450 (684)  |       | 0.174    | (43.24) | 55                          | 51        | 52        | 42        | 33        | 24        | <b>26</b> | 61        | 57                          | 55 | 47 | 42 | 36 | <b>30</b> | 66        | 62 | 58                          | 51 | 48 | 44 | <b>33</b> |
| 12        | 400 (189)   |       | 0.006    | (1.56)  | 42                          | 44        | 29        | 24        | 20        | 15        | -         | 46        | 49                          | 33 | 28 | 24 | 20 | -         | 50        | 53 | 37                          | 31 | 28 | 25 | <b>21</b> |
|           | 1000 (472)  |       | 0.039    | (9.72)  | 54                          | 50        | 41        | 36        | 32        | 25        | -         | 58        | 55                          | 45 | 40 | 36 | 31 | <b>23</b> | 61        | 58 | 48                          | 43 | 40 | 35 | <b>27</b> |
|           | 1600 (755)  |       | 0.100    | (24.88) | 60                          | 53        | 47        | 42        | 38        | 31        | <b>22</b> | 64        | 58                          | 51 | 46 | 42 | 36 | <b>28</b> | 67        | 61 | 54                          | 49 | 46 | 41 | <b>32</b> |
|           | 2060 (972)  |       | 0.166    | (41.25) | 63                          | 55        | 50        | 45        | 41        | 33        | <b>26</b> | 67        | 59                          | 54 | 49 | 46 | 39 | <b>32</b> | 71        | 63 | 58                          | 52 | 49 | 43 | <b>36</b> |
| 14        | 480 (227)   |       | 0.005    | (1.30)  | 35                          | 35        | 19        | 24        | 21        | 18        | -         | 39        | 40                          | 22 | 27 | 24 | 22 | -         | 43        | 44 | 25                          | 30 | 27 | 26 | -         |
|           | 1375 (649)  |       | 0.043    | (10.67) | 50                          | 46        | 37        | 36        | 33        | 28        | -         | 54        | 51                          | 40 | 39 | 37 | 32 | -         | 58        | 55 | 43                          | 42 | 39 | 36 | <b>24</b> |
|           | 2100 (991)  |       | 0.100    | (24.88) | 56                          | 51        | 44        | 41        | 38        | 32        | -         | 60        | 56                          | 47 | 44 | 41 | 36 | <b>25</b> | 64        | 60 | 50                          | 47 | 44 | 40 | <b>29</b> |
|           | 2800 (1321) |       | 0.178    | (44.24) | 60                          | 54        | 49        | 44        | 41        | 34        | <b>23</b> | 65        | 59                          | 52 | 48 | 45 | 39 | <b>28</b> | 68        | 63 | 55                          | 50 | 47 | 42 | <b>33</b> |
| 16        | 630 (297)   |       | 0.005    | (1.26)  | 38                          | 36        | 29        | 28        | 25        | 22        | -         | 43        | 43                          | 34 | 33 | 32 | 30 | -         | 47        | 48 | 38                          | 37 | 38 | 36 | -         |
|           | 1775 (838)  |       | 0.040    | (10.00) | 54                          | 49        | 44        | 39        | 34        | 30        | -         | 59        | 56                          | 49 | 44 | 41 | 38 | <b>25</b> | 62        | 61 | 53                          | 48 | 47 | 44 | <b>31</b> |
|           | 2800 (1321) |       | 0.100    | (24.88) | 60                          | 55        | 51        | 44        | 38        | 34        | <b>25</b> | 66        | 62                          | 56 | 49 | 45 | 42 | <b>31</b> | 69        | 67 | 60                          | 53 | 51 | 48 | <b>38</b> |
|           | 3660 (1727) |       | 0.171    | (42.52) | 64                          | 58        | 55        | 47        | 41        | 36        | <b>30</b> | 70        | 65                          | 60 | 52 | 48 | 44 | <b>36</b> | 73        | 70 | 64                          | 55 | 53 | 50 | <b>42</b> |
| 22        | 1200 (566)  |       | 0.005    | (1.27)  | 51                          | 50        | 41        | 42        | 39        | 37        | -         | 56        | 55                          | 51 | 49 | 44 | 41 | <b>25</b> | 59        | 59 | 58                          | 54 | 48 | 44 | <b>33</b> |
|           | 3300 (1557) |       | 0.039    | (9.64)  | 65                          | 61        | 55        | 53        | 51        | 47        | <b>30</b> | 69        | 66                          | 65 | 60 | 56 | 51 | <b>41</b> | 73        | 69 | 73                          | 66 | 60 | 54 | <b>49</b> |
|           | 5300 (2501) |       | 0.100    | (24.86) | 71                          | 66        | 62        | 58        | 56        | 52        | <b>37</b> | 76        | 71                          | 72 | 66 | 61 | 56 | <b>48</b> | 79        | 74 | 79                          | 71 | 65 | 59 | <b>56</b> |
|           | 7000 (3304) |       | 0.174    | (43.37) | 75                          | 69        | 66        | 62        | 59        | 55        | <b>42</b> | 80        | 74                          | 76 | 69 | 65 | 59 | <b>52</b> | 83        | 77 | 83                          | 74 | 69 | 61 | <b>60</b> |

The company has a policy of continuous product development, therefore we reserve the right to modify design and specifications without notice.

For more information, please contact your nearest Halton agency. To find it: [www.halton.com](http://www.halton.com)