



The EC RCD series of roof mounted down discharge fans incorporates very high efficiency electronically commutated DC motors with on board infinitely variable control modules. These fans are AC powered with control and power conversion electronics integrated into the motor. Motor speeds can be controlled with 0-10V input signal or 10K potentiometer.

The ability to control the speed at which the fan operates in response to real time ventilation demands is the basis of our energy saver range. Fan power consumption changes to the cube of speed reduction while air flow reduction stays proportional to reduced speed. This means that tailoring fan speed to meet exact air flow requirements has the potential to greatly reduce energy consumption through the removal redundant fan capacity.

#### Construction

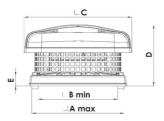
Components are made from UV stabilised polymer, corrosion protected steel and fibreglass. All models are fitted with bird mesh as standard. Available in optional Colorbond<sup>TM</sup>colours.

#### **Testing**

Rated fan performance has been determined by testing to ISO 5801: 2007. Fan sound data has been determined by testing to ISO 13347: 2004.

#### **Wiring Diagrams**

Refer to the latest product datasheet for individual model wiring instructions, data and specifications. Datasheets are available from our electronic selection software <code>FansSelect</code> downloadable at <code>www.pacificHVAC.com</code> It is a condition of our warranty that all equipment supplied is installed according to the requirements of AS/NZS3000:2007 Australian/New Zealand wiring rules.



#### **EC RCD** Size Maxkg 450/500 23/34

#### Suggested Specification

The centrifugal fans shall be of the EC RCD series manufactured by Pacific HVAC Engineering Pty Ltd

High performance backward curved centrifugal impellers shall be driven by EC motors incorporating on-board variable speed control.

All models shall be performance tested to ISO 5801: 2007 for air flow and ISO 13347: 2004 for sound.

#### **Ancillaries**







Model   No Sepret   NW	Model			Amps	RPS	dB(A) @ 3m			S	PL dB refer	red to 10 <sup>-</sup>	<sup>12</sup> W		
		% Speed	kW				63	125	250	500	1K	2K	4K	8K
S	RCD190-VEE	100	0.08	0.75	53	47	71	72	67	64	63	61	56	52
No.   No.		75	0.04	0.32	40	40	64	65	60	57	56	54	49	45
RCD280-VEE		50	0.01	0.09	27	30	54	55	50	47	46	44	39	35
Part		25	0.00	0.01	13	13	37	38	33	30	29	27	22	18
SO	RCD280-VEE	100	0.50	2.20	45	58	90	85	82	77	70	67	66	63
RCD400-VEE		75	0.21	0.93	34	51	83	78	75	70	63	60	59	56
RCD315-VEE		50	0.06	0.28	23	41	73	68	65	60	53	50	49	46
Part		25	0.01	0.03	11	24	56	51	48	43	36	33	32	29
	RCD315-VEE	100	0.50	3.15	32	58	90	85	82	77	70	67	66	63
RCD450-VEE   100		75	0.21	1.33	24	51	83	78	75	70	63	60	59	56
RCD355-VEE 100 0.50 3.15 32 52 83 81 78 69 61 57 57 50 43 3		50	0.06	0.39	16	41	73	68	65	60	53	50	49	46
		25	0.01	0.05	8	24	56	51	48	43	36	33	32	29
SO	RCD355-VEE	100	0.50	3.15	32	52	83	81	78	69	61	59	57	50
RCD400-VEE		75	0.21	1.33	24	45	76	74	71	62	54	52	50	43
RCD400-VEE         100         0.50         3.15         32         52         83         81         78         69         61         59         57         50         43           75         0.21         1.33         24         45         76         74         71         62         54         52         50         43           80         0.06         0.39         16         35         66         64         61         52         44         42         40         33           8 CD450-VEE         100         0.75         3.30         24         51         71         72         74         71         66         61         60         49           8 CD450-VEE         100         0.75         3.30         24         51         71         72         74         71         66         61         60         49           8 CD450-VEE         100         0.07         0.41         12         34         54         55         57         54         49         44         43         32           8 CD450-VDE         100         0.97         1.70         26         54         85         84         77		50	0.06	0.39	16	35	66	64	61	52	44	42	40	33
		25	0.01	0.05	8	18	49	47	44	35	27	25	23	16
	RCD400-VEE	100	0.50	3.15	32	52	83	81	78	69	61	59	57	50
RCD450-VEE         100         0.75         3.30         24         51         71         72         74         71         66         61         60         49           RCD450-VEE         100         0.75         3.30         24         51         71         72         74         71         66         61         60         49           75         0.32         1.39         18         44         64         65         67         64         59         54         53         42           50         0.09         0.41         12         34         54         55         57         54         49         44         43         32           25         0.01         0.05         6         17         37         38         40         37         32         27         26         15           RCD450-VDE         100         0.97         1.70         26         54         85         84         77         73         66         66         59         59         52         37           RCD450-VDE         100         0.92         0.03         6         20         51         50         43         39		75	0.21	1.33	24	45	76	74	71	62	54	52	50	43
RCD450-VEE         100         0.75         3.30         24         51         71         72         74         71         66         61         60         49           75         0.32         1.39         18         44         64         65         67         64         59         54         53         42           50         0.09         0.41         12         34         54         55         57         54         49         44         43         32           RCD450-VDE         100         0.97         1.70         26         54         85         84         77         73         66         66         59         44           RCD450-VDE         100         0.97         1.70         26         54         85         84         77         73         66         66         59         59         52         37           RCD450-VDE         100         0.12         0.21         13         37         68         67         60         56         49         49         42         27           RCD500-VDE         100         2.36         3.65         26         60         77         80		50	0.06	0.39	16	35	66	64	61	52	44	42	40	33
75		25	0.01	0.05	8	18	49	47	44	35	27	25	23	16
SO	RCD450-VEE	100	0.75	3.30	24	51	71	72	74	71	66	61	60	49
RCD450-VDE 100 0.97 1.70 26 54 85 84 77 73 66 65 59 59 44 27 27 26 15 8		75	0.32	1.39	18	44	64	65	67	64	59	54	53	42
RCD450-VDE 100 0.97 1.70 26 54 85 84 77 73 66 66 59 59 52 37   50 0.41 0.72 19 47 78 77 70 66 59 59 52 37   50 0.12 0.21 13 37 68 67 60 56 49 49 49 42 27   25 0.02 0.03 6 20 51 50 43 39 32 32 25 10    RCD500-VDE 100 2.36 3.65 26 60 77 80 83 82 77 77 76 76 79   75 1.00 1.54 19 53 71 74 77 76 71 71 70 73 74 77 76 76 71 71 70 73    RCD500-VDE 50 0.30 0.46 13 43 62 65 68 67 62 62 61 64 9   25 0.04 0.06 6 26 47 50 53 52 47 47 47 46 49    RCD560-VDE 100 2.90 4.43 28 62 79 84 81 81 78 71 70 67    RCD560-VDE 100 0.36 0.55 14 45 62 67 64 64 64 61 54 53 50   25 0.05 0.07 7 28 45 50 47 47 44 37 36 33    RCD630-VDE 100 1.79 2.80 19 60 82 81 82 78 76 71 69 64 61 57    RCD630-VDE 100 1.79 2.80 19 60 82 81 82 78 76 71 69 64 61 57    RCD630-VDE 100 0.22 0.35 9 43 65 64 65 61 59 59 54 51 47 68		50	0.09	0.41	12	34	54	55	57	54	49	44	43	32
75		25	0.01	0.05	6	17	37	38	40	37	32	27	26	15
SO   O.12   O.21   13   37   68   67   60   56   49   49   42   27	RCD450-VDE	100	0.97	1.70	26	54	85	84	77	73	66	66	59	44
RCD500-VDE         100         2.36         3.65         26         60         77         80         83         82         77         77         76         79           75         1.00         1.54         19         53         71         74         77         76         71         71         70         73           50         0.30         0.46         13         43         62         65         68         67         62         62         61         64           25         0.04         0.06         6         26         47         50         53         52         47         47         46         49           RCD560-VDE         100         2.90         4.43         28         62         79         84         81         81         78         71         70         67           75         1.22         1.87         21         55         72         77         74         74         71         64         63         60           25         0.05         0.07         7         28         45         50         47         47         44         37         36         33 <tr< td=""><td></td><td>75</td><td>0.41</td><td>0.72</td><td>19</td><td>47</td><td>78</td><td>77</td><td>70</td><td>66</td><td>59</td><td>59</td><td>52</td><td>37</td></tr<>		75	0.41	0.72	19	47	78	77	70	66	59	59	52	37
RCD500-VDE         100         2.36         3.65         26         60         77         80         83         82         77         77         76         79         70         73         70         74         75         62         62         61         64         49         64         49         84         81         81         78         71         70         67         70		50	0.12	0.21	13	37	68	67	60	56	49	49	42	27
75       1.00       1.54       19       53       71       74       77       76       71       71       70       73         50       0.30       0.46       13       43       62       65       68       67       62       62       61       64         25       0.04       0.06       6       26       47       50       53       52       47       47       46       49         RCD560-VDE       100       2.90       4.43       28       62       79       84       81       81       78       71       70       67         75       1.22       1.87       21       55       72       77       74       74       71       64       63       60         50       0.36       0.55       14       45       62       67       64       64       61       54       53       50         25       0.05       0.07       7       28       45       50       47       47       44       37       36       33         RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78 </td <td></td> <td>25</td> <td>0.02</td> <td>0.03</td> <td>6</td> <td>20</td> <td>51</td> <td>50</td> <td>43</td> <td>39</td> <td>32</td> <td>32</td> <td>25</td> <td>10</td>		25	0.02	0.03	6	20	51	50	43	39	32	32	25	10
SO       0.30       0.46       13       43       62       65       68       67       62       62       61       64         25       0.04       0.06       6       26       47       50       53       52       47       47       46       49         RCD560-VDE       100       2.90       4.43       28       62       79       84       81       81       78       71       70       67         75       1.22       1.87       21       55       72       77       74       74       71       64       63       60         50       0.36       0.55       14       45       62       67       64       64       61       54       53       50         RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78       76       71       68       64         75       0.76       1.18       14       53       75       74       75       71       69       64       61       57         50       0.022       0.35       9       43       65       64       65       61       <	RCD500-VDE	100	2.36	3.65	26	60	77	80	83	82	77	77	76	79
RCD560-VDE         100         2.90         4.43         28         62         79         84         81         81         78         71         70         67           75         1.22         1.87         21         55         72         77         74         74         71         64         63         60           50         0.36         0.55         14         45         62         67         64         64         61         54         53         50           25         0.05         0.07         7         28         45         50         47         47         44         37         36         33           RCD630-VDE         100         1.79         2.80         19         60         82         81         82         78         76         71         68         64           75         0.76         1.18         14         53         75         74         75         71         69         64         61         57           50         0.22         0.35         9         43         65         64         65         61         59         54         51         47 <td></td> <td>75</td> <td>1.00</td> <td></td> <td></td> <td></td> <td>71</td> <td>74</td> <td>77</td> <td>76</td> <td>71</td> <td>71</td> <td>70</td> <td>73</td>		75	1.00				71	74	77	76	71	71	70	73
RCD560-VDE         100         2.90         4.43         28         62         79         84         81         81         78         71         70         67           75         1.22         1.87         21         55         72         77         74         74         71         64         63         60           50         0.36         0.55         14         45         62         67         64         64         61         54         53         50           25         0.05         0.07         7         28         45         50         47         47         44         37         36         33           RCD630-VDE         100         1.79         2.80         19         60         82         81         82         78         76         71         68         64           75         0.76         1.18         14         53         75         74         75         71         69         64         61         57           50         0.22         0.35         9         43         65         64         65         61         59         54         51         47 <td></td> <td>50</td> <td>0.30</td> <td>0.46</td> <td>13</td> <td>43</td> <td>62</td> <td>65</td> <td>68</td> <td>67</td> <td>62</td> <td>62</td> <td>61</td> <td>64</td>		50	0.30	0.46	13	43	62	65	68	67	62	62	61	64
75       1.22       1.87       21       55       72       77       74       74       71       64       63       60         50       0.36       0.55       14       45       62       67       64       64       61       54       53       50         25       0.05       0.07       7       28       45       50       47       47       44       37       36       33         RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78       76       71       68       64         75       0.76       1.18       14       53       75       74       75       71       69       64       61       57         50       0.22       0.35       9       43       65       64       65       61       59       54       51       47		25	0.04	0.06	6	26	47	50	53	52	47	47	46	49
75       1.22       1.87       21       55       72       77       74       74       71       64       63       60         50       0.36       0.55       14       45       62       67       64       64       61       54       53       50         25       0.05       0.07       7       28       45       50       47       47       44       37       36       33         RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78       76       71       68       64         75       0.76       1.18       14       53       75       74       75       71       69       64       61       57         50       0.22       0.35       9       43       65       64       65       61       59       54       51       47	RCD560-VDE	100	2.90	4.43	28	62	79	84	81	81	78	71	70	67
50       0.36       0.55       14       45       62       67       64       64       61       54       53       50         25       0.05       0.07       7       28       45       50       47       47       44       37       36       33         RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78       76       71       68       64         75       0.76       1.18       14       53       75       74       75       71       69       64       61       57         50       0.22       0.35       9       43       65       64       65       61       59       54       51       47							72	77	74		71	64	63	60
RCD630-VDE       100       1.79       2.80       19       60       82       81       82       78       76       71       68       64         75       0.76       1.18       14       53       75       74       75       71       69       64       61       57         50       0.22       0.35       9       43       65       64       65       61       59       54       51       47		50	0.36	0.55	14	45	62	67	64	64	61	54	53	50
75 0.76 1.18 14 53 <b>75 74 75 71 69 64 61 57</b> 50 0.22 0.35 9 43 <b>65 64 65 61 59 54 51 47</b>		25	0.05	0.07	7	28	45	50	47	47	44	37	36	33
75 0.76 1.18 14 53 <b>75 74 75 71 69 64 61 57</b> 50 0.22 0.35 9 43 <b>65 64 65 61 59 54 51 47</b>	RCD630-VDE	100	1.79	2.80	19	60	82	81	82	78	76	71	68	64
							75	74	75	71	69	64	61	57
25 0.03 0.04 5 26 <b>48 47 48 44 42 37 34 30</b>		50	0.22	0.35	9	43	65	64	65	61	59	54	51	47
		25	0.03	0.04	5	26	48	47	48	44	42	37	34	30

VEE = single phase. VDE = three phase



