ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

TD-SILENT ECOWATT - MODELS 350 TO 1000

Low profile “Mixed-flow” fans with sound-absorbent insulation, extremely quiet, fan casing manufactured in plastic material, with a specially designed internal skin to direct the sound waves at the right angle for them to be captured by sound-absorbent material, fitted with flexible rubber seals on the inlet and outlet to absorb vibrations, with an external connection box, a body that can be removed without dismantling the adjacent ducting and therefore facilitating any installation or maintenance.

Brushless EC motor, high efficiency and low consumption, suitable for single phase supply 230V±15%/50-60Hz, IP44, thermal overload protection.

Fan speed 100% adjustable with the potentiometer placed in the connection box or with an external control type REB-ECOWATT. Analogue input with terminals in the terminal box to control the fan with 0-10V input signal.

Models are suitable for mounting in any orientation and operation within ambient air temperatures between -20ºC up to +40ºC. Suitable for any kind of ventilation application where the noise level of the ventilation system is of particular importance and, due to continuous operation, a significant energy saving is desirable. It is also suitable for applications that require a Demand Controlled Ventilation System involving the use of other sensors or controls.

TD-SILENT ECOWATT - MODELS 1300 AND 2000

Low profile “Mixed-flow” fans with sound-absorbent insulation, extremely quiet, manufactured from heavy gauge sheet steel protected by a tough epoxy polyester paint coating, acoustic insulation (MI) glass fibre, outer shell and aerodynamic inlet to improve airflow and reduce sound.

A body that can be removed without dismantling the adjacent ducting and therefore facilitating any installation or maintenance.

Brushless EC motor, high efficiency and low consumption, suitable for single phase supply 230V±15%/50-60Hz, IP44, thermal overload protection.

Fan speed 100% adjustable with the potentiometer placed in the connection box or with an external control type REB-ECOWATT. Analogue input with terminals in the terminal box to control the fan with 0-10V input signal.

Models are suitable for mounting in any orientation and operation within ambient air temperatures between -20ºC up to +40ºC. Suitable for any kind of ventilation application where the noise level of the ventilation system is of particular importance and, due to continuous operation, a significant energy saving is desirable. It is also suitable for applications that require a Demand Controlled Ventilation System involving the use of other sensors or controls.
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

MODELS 350 TO 1000

Low profile
The low profile of the TD-SILENT ECOWATT fans makes them the most effective solution for installations where space is very limited, especially in ceiling voids.

Easy maintenance
Removable motor-body assembly to easy cleaning and repairing without touching the ducts. Support plastic brackets simplify the operation.

Low noise level
Sound waves produced inside the TD, are directed through the perforated inner skin \( \text{1} \) and absorbed by the layer of sound absorbent material \( \text{2} \).

Connection box rotated 360º
Connection box can be rotated 360º, to facilitate easy connection of the power cable.

Rubber seals
Bi-material inlet and outlet incorporating a rubber seal to facilitate installation and absorb vibrations.

Support bracket
Support bracket for installing on a wall or ceiling, incorporating twin-material support brackets for the motor section that absorbs vibration.

Easy to mount
Loosen and open clamps on both sides. Remove the fan body. Remove the terminal box lid. Connect electrical supply. Remount the fan body by tightening the clamps.

www.solerpalau.com
MODELS 1300 AND 2000

Low profile - compact
Low profile fans TD-1300/250 SILENT ECOWATT and TD-2000/315 SILENT ECOWATT are ideal for installations where space is very limited, especially in ceiling voids.

Easy maintenance
Detachable fan unit for maintenance, or cleaning, without demounting duct connections.

Low noise level
1. Acoustic insulation [A2-s1, d0] glass fibre.
2. Outer shell.
3. Aerodynamic inlet to improve air flow and reduce sound.
4. Attenuating perforated skin.

Support bracket
Suitable for wall or ceiling mounting. Fixing brackets to the motor-body included.

IP55 remote terminal box
Easy installation and connection.

www.solerpalau.com
### TECHNICAL CHARACTERISTICS

<table>
<thead>
<tr>
<th>Model</th>
<th>Input signal voltage (V)</th>
<th>Speed (rpm)</th>
<th>Maximum absorbed power (W)</th>
<th>Maximum absorbed current (A)</th>
<th>Airflow at free discharge (m³/h)</th>
<th>Sound pressure level* LpA at 3 m (dB(A))</th>
<th>Weight (kg)</th>
<th>Wiring diagram**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TD-350/100-125 SILENT ECOWATT</strong></td>
<td>10</td>
<td>2235</td>
<td>19</td>
<td>0,14</td>
<td>350</td>
<td>36</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2000</td>
<td>15</td>
<td>0,11</td>
<td>305</td>
<td>34</td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1580</td>
<td>10</td>
<td>0,07</td>
<td>240</td>
<td>28</td>
<td>28</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1170</td>
<td>7</td>
<td>0,06</td>
<td>180</td>
<td>30</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td><strong>TD-500/150-160 SILENT ECOWATT</strong></td>
<td>10</td>
<td>2510</td>
<td>39</td>
<td>0,25</td>
<td>545</td>
<td>44</td>
<td>43</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2300</td>
<td>32</td>
<td>0,23</td>
<td>500</td>
<td>41</td>
<td>41</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1800</td>
<td>18</td>
<td>0,13</td>
<td>390</td>
<td>36</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1320</td>
<td>10</td>
<td>0,08</td>
<td>240</td>
<td>30</td>
<td>31</td>
<td>23</td>
</tr>
<tr>
<td><strong>TD-1000/200 SILENT ECOWATT</strong></td>
<td>10</td>
<td>2470</td>
<td>99</td>
<td>0,66</td>
<td>1.000</td>
<td>46</td>
<td>53</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2120</td>
<td>64</td>
<td>0,46</td>
<td>860</td>
<td>42</td>
<td>48</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1660</td>
<td>34</td>
<td>0,25</td>
<td>675</td>
<td>37</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1220</td>
<td>17</td>
<td>0,12</td>
<td>485</td>
<td>30</td>
<td>34</td>
<td>25</td>
</tr>
<tr>
<td><strong>TD-1300/250 SILENT ECOWATT</strong></td>
<td>10</td>
<td>2440</td>
<td>143</td>
<td>0,6</td>
<td>1.240</td>
<td>46</td>
<td>53</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2035</td>
<td>88</td>
<td>0,4</td>
<td>1.040</td>
<td>43</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1645</td>
<td>54</td>
<td>0,3</td>
<td>810</td>
<td>38</td>
<td>30</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1200</td>
<td>29</td>
<td>0,2</td>
<td>580</td>
<td>30</td>
<td>25</td>
<td>34</td>
</tr>
<tr>
<td><strong>TD-2000/315 SILENT ECOWATT</strong></td>
<td>10</td>
<td>2520</td>
<td>247</td>
<td>1,0</td>
<td>1.660</td>
<td>52</td>
<td>41</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2075</td>
<td>146</td>
<td>0,6</td>
<td>1.380</td>
<td>43</td>
<td>31</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1670</td>
<td>85</td>
<td>0,4</td>
<td>1.120</td>
<td>38</td>
<td>30</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1230</td>
<td>41</td>
<td>0,2</td>
<td>790</td>
<td>30</td>
<td>25</td>
<td>34</td>
</tr>
</tbody>
</table>

* Sound pressure level measured in free field condition at 3 m, at the 2, 5, 8 and 11 working point of the performance curve.
** See section of Wiring Diagrams.
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

DIMENSIONS (mm)

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-350/100</td>
<td>575</td>
<td>97</td>
<td>252</td>
<td>204</td>
<td>100</td>
<td>250</td>
<td>83</td>
<td>121</td>
</tr>
<tr>
<td>TD-350/125</td>
<td>462</td>
<td>123</td>
<td>252</td>
<td>204</td>
<td>100</td>
<td>250</td>
<td>83</td>
<td>121</td>
</tr>
<tr>
<td>TD-500/150-160*</td>
<td>484</td>
<td>147</td>
<td>274</td>
<td>221</td>
<td>116</td>
<td>250</td>
<td>96</td>
<td>134</td>
</tr>
<tr>
<td>TD-1000/200</td>
<td>568</td>
<td>198</td>
<td>327</td>
<td>264</td>
<td>145</td>
<td>340</td>
<td>129</td>
<td>164</td>
</tr>
</tbody>
</table>

*It provides an additional rubber gasket for installation in 160 mm ducts.

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD-1300/250</td>
<td>680</td>
<td>248</td>
<td>331</td>
<td>387</td>
<td>140</td>
<td>200</td>
<td>280</td>
<td>171</td>
</tr>
<tr>
<td>TD-2000/315</td>
<td>825</td>
<td>312</td>
<td>373</td>
<td>432</td>
<td>152</td>
<td>260</td>
<td>335</td>
<td>192</td>
</tr>
</tbody>
</table>

www.solerpalau.com In-Line duct fans TD-SILENT ECOWATT
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS
- qv: Airflow in m³/h.
- psf: Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in W/m³/s (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

TD-350/100-125 SILENT ECOWATT

<table>
<thead>
<tr>
<th>Inlet</th>
<th>Outlet</th>
<th>Radiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td>33</td>
<td>31</td>
<td>41</td>
</tr>
<tr>
<td>25</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td>29</td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td>24</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>62</td>
<td>64</td>
<td>40</td>
</tr>
<tr>
<td>01</td>
<td>00</td>
<td>02</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>02</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
<tr>
<td>00</td>
<td>00</td>
<td>03</td>
</tr>
</tbody>
</table>

www.solerpalau.com
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS
- \( q_v \): Airflow in m\(^3\)/h.
- \( p_{sf} \): Static pressure in Pa.
- \( P \): Input power in W.
- SFP: Specific fan power in W/m\(^3\)/s (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

**TD-500/150-160 SILENT ECOWATT**

www.solerpalau.com
PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS

- \( q_v \): Airflow in m\(^3\)/h.
- \( p_{sf} \): Static pressure in Pa.
- \( P \): Input power in W.
- \( SFP \): Specific fan power in W/m\(^3\)/s (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

![Graph showing performance curves for TD-1000/200 Silent ECOWATT fans.](image-url)
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS
- \( q_v \): Airflow in m\(^3\)/h.
- \( p_{st} \): Static pressure in Pa.
- \( P \): Input power in W.
- SFP: Specific fan power in W/m\(^3\)/h [blue curves].
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dBA.

TD-1300/250 SILENT ECOWATT

![Performance Curves Diagram](image-url)
ULTRA-QUIET CIRCULAR DUCT FANS
TD-SILENT ECOWATT Series

PERFORMANCE CURVES - ACOUSTIC CHARACTERISTICS
- \( q_v \): Airflow in m\(^3\)/h.
- \( p_s \): Static pressure in Pa.
- P: Input power in W.
- SFP: Specific fan power in W/m\(^3\)/h (blue curves).
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards.
- Sound power in dB(A).

<table>
<thead>
<tr>
<th>TD-2000/315 SILENT ECOWATT</th>
<th>( q_v ) [m(^3)/h]</th>
<th>4V</th>
<th>6V</th>
<th>8V</th>
<th>10V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet</td>
<td>35</td>
<td>50</td>
<td>64</td>
<td>63</td>
<td>68</td>
</tr>
<tr>
<td>Outlet</td>
<td>37</td>
<td>54</td>
<td>66</td>
<td>70</td>
<td>74</td>
</tr>
<tr>
<td>Radiated</td>
<td>27</td>
<td>37</td>
<td>48</td>
<td>48</td>
<td>57</td>
</tr>
<tr>
<td>Inlet</td>
<td>35</td>
<td>51</td>
<td>64</td>
<td>68</td>
<td>64</td>
</tr>
<tr>
<td>Outlet</td>
<td>35</td>
<td>55</td>
<td>65</td>
<td>71</td>
<td>74</td>
</tr>
<tr>
<td>Radiated</td>
<td>22</td>
<td>38</td>
<td>51</td>
<td>49</td>
<td>58</td>
</tr>
<tr>
<td>Inlet</td>
<td>37</td>
<td>54</td>
<td>71</td>
<td>64</td>
<td>68</td>
</tr>
<tr>
<td>Outlet</td>
<td>37</td>
<td>54</td>
<td>65</td>
<td>70</td>
<td>69</td>
</tr>
<tr>
<td>Radiated</td>
<td>23</td>
<td>38</td>
<td>51</td>
<td>49</td>
<td>58</td>
</tr>
<tr>
<td>Inlet</td>
<td>33</td>
<td>50</td>
<td>63</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Outlet</td>
<td>33</td>
<td>54</td>
<td>64</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>Radiated</td>
<td>21</td>
<td>36</td>
<td>64</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>Inlet</td>
<td>34</td>
<td>60</td>
<td>64</td>
<td>59</td>
<td>63</td>
</tr>
<tr>
<td>Outlet</td>
<td>32</td>
<td>62</td>
<td>64</td>
<td>67</td>
<td>67</td>
</tr>
<tr>
<td>Radiated</td>
<td>23</td>
<td>46</td>
<td>45</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Inlet</td>
<td>36</td>
<td>60</td>
<td>62</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Outlet</td>
<td>36</td>
<td>60</td>
<td>60</td>
<td>64</td>
<td>63</td>
</tr>
<tr>
<td>Radiated</td>
<td>28</td>
<td>40</td>
<td>44</td>
<td>41</td>
<td>47</td>
</tr>
<tr>
<td>Inlet</td>
<td>30</td>
<td>54</td>
<td>64</td>
<td>64</td>
<td>69</td>
</tr>
<tr>
<td>Outlet</td>
<td>28</td>
<td>49</td>
<td>58</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>Radiated</td>
<td>22</td>
<td>33</td>
<td>40</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>Inlet</td>
<td>31</td>
<td>47</td>
<td>59</td>
<td>56</td>
<td>58</td>
</tr>
<tr>
<td>Outlet</td>
<td>27</td>
<td>51</td>
<td>58</td>
<td>62</td>
<td>64</td>
</tr>
<tr>
<td>Radiated</td>
<td>23</td>
<td>35</td>
<td>42</td>
<td>42</td>
<td>47</td>
</tr>
<tr>
<td>Inlet</td>
<td>32</td>
<td>52</td>
<td>40</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>Outlet</td>
<td>30</td>
<td>58</td>
<td>67</td>
<td>62</td>
<td>61</td>
</tr>
<tr>
<td>Radiated</td>
<td>24</td>
<td>40</td>
<td>53</td>
<td>62</td>
<td>67</td>
</tr>
<tr>
<td>Inlet</td>
<td>39</td>
<td>50</td>
<td>57</td>
<td>51</td>
<td>53</td>
</tr>
<tr>
<td>Outlet</td>
<td>35</td>
<td>54</td>
<td>56</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>Radiated</td>
<td>31</td>
<td>38</td>
<td>40</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>Inlet</td>
<td>28</td>
<td>41</td>
<td>50</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Outlet</td>
<td>26</td>
<td>44</td>
<td>48</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Radiated</td>
<td>20</td>
<td>28</td>
<td>35</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>Inlet</td>
<td>29</td>
<td>44</td>
<td>52</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Outlet</td>
<td>26</td>
<td>47</td>
<td>50</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Radiated</td>
<td>21</td>
<td>30</td>
<td>37</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Inlet</td>
<td>33</td>
<td>47</td>
<td>52</td>
<td>48</td>
<td>50</td>
</tr>
<tr>
<td>Outlet</td>
<td>28</td>
<td>49</td>
<td>52</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Radiated</td>
<td>24</td>
<td>33</td>
<td>38</td>
<td>37</td>
<td>39</td>
</tr>
<tr>
<td>Inlet</td>
<td>37</td>
<td>43</td>
<td>48</td>
<td>46</td>
<td>45</td>
</tr>
<tr>
<td>Outlet</td>
<td>32</td>
<td>47</td>
<td>48</td>
<td>51</td>
<td>49</td>
</tr>
<tr>
<td>Radiated</td>
<td>28</td>
<td>29</td>
<td>34</td>
<td>35</td>
<td>34</td>
</tr>
</tbody>
</table>
ELECTRICAL ACCESSORIES

**REB-ECOWATT**
Remote speed control.
Enables the speed control of the fan continuously, manually and remote.

**CONTROL ECOWATT AC/DC**
Control element for demand controlled ventilation systems in public, commercial residential buildings it automatically modifies the fan speed to adapt it to the needs defined in the system, measured with sensors.

**SCO2-A**
Ambient $\text{CO}_2$ and temperature sensor.

**SCO2-AD**
Ambient $\text{CO}_2$ and temperature sensor with display.

**SCHT-AD**
Ambient $\text{CO}_2$ sensor, temperature and relative humidity with display.

**CPFL-S / CPFL-E**
Presence detector for ceiling mount, sensitive to infrared radiation by bodies in movement, with a 360º detecting angle.
Power supply: 1-230 V.

**TDP-S/TDP-D/TDP-PI**
Pressure sensor
Used to control the pressure in ventilation systems under constant pressure or constant flow. They can read a difference in pressure between two points, transforming it into an electric signal for the different types of control.

**REMP**
Motorised damper, opens proportionately and is controlled by the BEAS control module.
Power supply: 24 VAC or 24 VD, depending on the models.